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ABOUT THE SOUTH

FOR THE
INFORMATION OF
HOME SEEKERS
AND
INVESTORS

ABOUT THE SOUTH

ON LINES OF THE ILLINOIS CENTRAL AND
YAZOO & MISSISSIPPI VALLEY RAILROADS.

IMPORTANT QUESTIONS TERSELY ANSWERED

FOR THE INFORMATION OF

HOME SEEKERS AND INVESTORS.



ISSUED BY THE
PASSENGER DEPARTMENT,
ILLINOIS CENTRAL RAILROAD COMPANY,
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INTRODUCTORY.

The Passenger Department of the Illinois Central Railroad Company has within the past eighteen months published and distributed throughout the United States eleven circulars upon as many different topics relating to the question of agriculture in the States of Kentucky, Tennessee, Mississippi and Louisiana. These special topics are found on pages of this pamphlet as noted in the index, and are as follows: "Southern Farm Lands," "Mississippi Valley Cotton Lands," "Truck Farming in the South," "Fruit Growing in the South," "Stock Raising in the South," "Dairying in the South," "Grasses and Forage Plants," "Soils of Kentucky, Tennessee and Mississippi," "Market Facilities," "Southern Immigration," and "Letters from Northern Farmers." Since the publication of these circulars, 400,000 have been distributed in the Eastern, Northern and Western States.

The development of the agricultural conditions of the four Southern States referred to, has, in some respects, been phenomenal. The advance in the price of cotton has made the growing of this product very profitable upon the alluvial lands of the States mentioned. Since the circular on "Dairying in the South" was issued (December 15, 1902), the shipping of milk from points on the line of the Illinois Central Railroad in Northern Louisiana to the city of New Orleans has developed into a paying and important industry. Truck farmers realize that not only is the producing of milk, for which they get fifteen cents net per gallon, profitable, but it reduces the fertilizer account to the minimum, at the same time enriching the soil of the farm. A city ordinance of New Orleans provides that within three years all dairies must be moved outside, and thereafter none can be established inside the city limits. This should, and we believe will, quadruple the shipment of milk from Illinois Central points to the New Orleans market.

A reference to some of the letters from Northern farmers now located in the South, which will be found on the last pages of this pamphlet, will convince the most skeptical that nowhere in the United States is there a section of country so adapted to profitable truck farming as that on and adjacent to the Illinois Central Railroad in the States of Louisiana and Mississippi, and for the following reasons: First, on account of the season of the year, *which is late winter or early spring*, when such products are ready for market; second, the adaptability of the soil to the growth of

vegetables and strawberries, when proper fertilizer is freely used ; third, the excellent equipment and facilities afforded by the Illinois Central Railroad Company for quick and safe transportation to all northern markets. Men who have thoroughly and scientifically investigated the subject unhesitatingly declare that better results are obtained and more net money made per acre from trucking in the territory mentioned than in any other part of the United States. Coupled with this is the fact that in no part of the country is there found better water than from the numerous artesian wells, and certainly no one will contend that there is a more healthy, happy and contented people and a better class of citizens than is found in that territory.

The rapid developments of Central, Eastern and Northern Mississippi and Tennessee in the matter of diversified farming has been as marked as that of truck farming farther south. Indeed, farming in the South by northern people is no longer an experiment. The long southern summers are preferred to long northern winters. The expense of living in the South is much less than in the North.

Lands in the South that will produce abundant crops are still in the market at low prices, but it is fair to say they are steadily advancing, and recent developments in that territory warrant the conclusion that values will greatly appreciate within the next few years.

The construction of the Panama Canal, now practically assured, will make New Orleans the natural gateway for the people and products of the Mississippi Valley to the Orient and all far-away markets of the East. Already the Crescent City is feeling the benefit it will derive from such commercial advantages, and every line of business in that city has been greatly stimulated. Memphis is another southern industrial center which enjoys the distinction of being second only to New Orleans in the magnitude of its trade and the variety of manufactured products.

In view of these recent developments we feel fully justified in the statement that nowhere in the United States are the opportunities for land investments better, or the prospects for establishing prosperous and happy homes greater than at points on the line of the Illinois Central and Yazoo & Mississippi Valley Railroads in the States of Kentucky, Tennessee, Mississippi and Louisiana.

SOUTHERN FARM LANDS.

Never in the history of the United States has there been such an active demand for farm lands throughout the entire Northwest, nor such a phenomenal advance in prices as during the past three years. In Illinois the advance has been from \$90 to \$150 an acre; in Iowa from \$25 to \$75 and even higher; in Minnesota from \$15 to \$50, and in South Dakota from \$2.50 to \$30. Real estate prophets and others have each year predicted that the top has been reached, and that prices must decline. Such, however, has not been the case. On the contrary, not only practical farmers, but bankers, mechanics, merchants and manufacturers, having idle money, have shown their confidence in the future of cultivable lands by making liberal land investments, and the prices have continued to go higher and higher.

The question now agitating the minds of all real estate agents (through whom 90 per cent of all the farm lands are sold) is, where can we find low priced real estate, and where will be the next great advance in lands? The object of this circular is to advise all real estate agents and others who handle farm lands, that every indication now points to the SOUTH as the center of the next great boom, and our reasons for thinking so are based upon the following facts:

SOUTHERN FARM LANDS ARE LOW AS COMPARED WITH THE VALUE OF SOUTH- ERN FARM PROD- UCTS.

First. Southern farm lands are too low, as compared with the market value of Southern farm products. To illustrate: In Iowa, lands selling in the market for \$60 to \$75 an acre, are rented for only \$3 per acre. In Mississippi, and especially in the great cotton belt, the Mississippi Valley, improved plantations can be bought at from \$30 to \$35 per acre, and readily rented for \$6 and even \$7 per acre, cash, or, what is better at the present high price of cotton, for 100 pounds of lint cotton per acre; and upon which the taxes are not more than half what they are in Iowa or Illinois.



A Corn Field in the Yazoo Valley.
Second Year after Deadening Trees.

AN INCREASED DEMAND AND INCREASED LOCAL MARKETS FOR ALL SOUTHERN PRODUCTS.



A Stock Farm in the Yazoo Valley.

ture, caskets, vehicles and farm implements. Cotton and all its by-products, the raw material of the South that for years has gone begging, are now in demand at greatly advanced prices, and with this comes a natural demand, at higher prices, for everything grown upon the farm.

Second. All indications point to an increased demand and increased local markets for all kinds of Southern farm products. The development of Southern oil fields furnishing cheap fuel is attracting the attention of manufacturers everywhere, and new and important industries are springing up at many points along the line of the Illinois Central and the Yazoo & Mississippi Valley railroads. Already these industries are creating a demand for all kinds of lumber used in the manufacture of furniture.

THE CITIES OF THE SOUTH ARE INCREASING IN POPULATION AT A RAPID RATE.

Third. The cities of the South are, with the introduction of new industries, increasing in population at a rapid rate. Every branch of business is prosperous, and hence there is an increased demand for every kind of garden truck and fruits grown upon the farm. Under such conditions there can be but one result: *Southern farm lands must, and will, advance.*

IMMIGRATION AND A RAPID ADVANCE IN THE PRICES OF FARM LANDS.

Fourth. The construction of an interoceanic canal, whether at Panama or Nicaragua, will make New Orleans the gateway to important new markets that use largely the mining, manufacturing and agricultural products of the South. It will be the means of calling the attention of thousands of tourists and capitalists to the fertile lands of the Mississippi Valley. It will result in large investments of Northern capital, which are invariably followed by immigration and a rapid advance in the price of farm lands.

BEST QUALITY OF TIMBER LANDS ARE YET ON THE MARKET.

Fifth. Unimproved hardwood timber lands of the best quality are yet on the market at points in Mississippi, between Memphis and Vicksburg, at from \$7 to \$10 per acre. The cost of clearing and fencing these lands is not to exceed \$10 per acre, and when cleared, they will grow a bale of cotton worth from \$40 to \$50 per bale, or 60 bushels of corn to the acre worth 60 cents to \$1 per bushel. Every

real estate agent who has studied the agricultural conditions of this country understands how, with the rapid increase in population, making a constantly increased demand for every thing eatable, it is utterly impossible for fertile lands to remain at present values in any section of our country, North or South.

**NEW ORLEANS WITH HER LOCAL EXPORT MARKET FACILITIES IS A FACTOR
IN THE DEVELOPMENT OF FARM LANDS.**

The new industrial and commercial conditions that obtain at New Orleans—the recognized metropolis of the South—are a source of wonder and surprise to those who remember the Crescent City as it has been for a half century prior to 1900. Throughout the city is now heard the hum of new industries, and instead of being a sleepy and quaint old southern city, it is fast coming to the front as a city of commercial activity, with prospects for the future not excelled by any city in the United States; and the growth and development of this city, and her local and export market facilities, must necessarily increase the price of all farm lands tributary thereto.

The Passenger Department of the Illinois Central Railway Company is interested in the development of all the cities on, and the country tributary to, its lines. It is interested in having the real estate agents on its lines successful, and would urge that they at once turn their attention to the South, as affording unusual opportunities for making money during the next five or more years. We confidently believe that the lands to



North Dakota Family Located in the South.

which we have referred will, in the near future, advance in value from \$5 to \$10 per acre. We, therefore, urge that all who are engaged exclusively in the sale of real estate shall investigate thoroughly the lands on and tributary to the Company's lines, in the states of Kentucky, Tennessee, Mississippi and Louisiana. We want you interested with us in the development of this country, and will be glad to correspond with you in reference to the same; and, if mutually agreeable, to make the usual advertising contracts with all agents who will devote their time and energy to the sale of Southern farm lands.

MISSISSIPPI VALLEY COTTON LANDS.

The circular recently issued by the Passenger Department of the Illinois Central Railroad Company, known as "Southern Farm Lands," has awakened a general interest in the subject of cotton growing in the Mississippi Delta, as compared with grain and stock raising in the Northern States; and as a reply to the many letters of inquiry, we publish the following, which, in a general way, answers a few of the questions.

QUESTION No. 1. *Will you please explain how it is possible, as stated in your circular, for improved cotton lands in the Mississippi Valley to rent for \$6 and \$7 per acre, which can be purchased for from \$30 to \$35 per acre?*

We confess, it is hard to explain. But, after all, it is a condition, not a theory; and one that could not obtain anywhere except in the South, where the tenants do not seem interested in owning farms. Tenants throughout the Northwest expect, in time, to have farms of their own, and they will not pay such rentals as will simply afford them a living. They expect to save a few hundred dollars every year, with which, in the course of seven to ten years, they can buy a farm of their own. Not so with the colored tenants of the South. They literally believe that "sufficient unto the day is the evil thereof," and they do not expect more than a living, and apparently are happy in the thought that they are sure of enough to eat and a place to sleep. Hence they are willing to pay such rentals as the landlord may exact, providing they are reasonably sure of a very moderate living.

QUESTION No. 2. *Is there ever any scarcity of tenants in the Mississippi Valley?*

We do not remember of having seen, or even heard of a cotton plantation not being worked for want of a tenant. The fact that these fertile lands in the Valley produce from three-fourths of a bale to a bale of cotton per acre, without an ounce of fertilizer, while in the older cotton producing sections, with expensive fertilization, only one-fourth to one-half a bale is expected, has driven many of the colored cotton growers to the Mississippi Valley, and, as a rule, there are a dozen tenants for every plantation wherever the soil is sufficiently fertile to grow such cotton as is grown in the Mississippi Valley between Memphis and Vicksburg.

QUESTION No. 3. *How does the expense of maintaining a cotton plantation compare with that of an Illinois or Iowa farm?*

The cost of maintenance is decidedly in favor of the cotton plantation. To illustrate, a Northern farm of say five hundred acres, will have from \$4,000 to \$7,000 invested in buildings. These buildings are constantly in need of repairs. They must be painted every three to five years, which is of itself quite an expense. New barbed wire fences are necessary every year. Meadows and pastures must be reseeded. Indeed, the expense of maintaining a No. 1 Northern farm is one that only those can appreciate who have had the experience. Now contrast the difference between such a farm and a Southern plantation of the same size. The plantation would have, perhaps, twenty negro cabins, made of rough boards, and a shed for stock, machinery, tools, etc., the entire cost of which would not exceed \$2,500. And the cost of maintenance would not exceed \$25 annually, even if the cabins were whitewashed, as is sometimes the case. If new fencing is necessary, a few hours' work will provide posts and rails from the timber which grows on every plantation.

QUESTION No. 4. *Is the rent collectible, and are the colored cotton growers reliable and responsible?*



West Tennessee Orchard and Crop of Cow Peas.

Colored men, like other tenants, are not all alike—some are good, some very good, some bad, some very bad. The laws of Mississippi, however, so favor the landlord that it is a rare thing for a tenant on a cotton farm to escape paying his rent, and it is also fair to say that it is unusual to find one who is disposed to do so. They expect to grow cotton next

year, and the year after. They understand if they run short of cornmeal and bacon, that the landlord will help them out until the next crop is marketed. Hence a desire on the part of the tenant to live up to his contract.

QUESTION No. 5. Do you advise Northern farmers to locate in the Mississippi Valley and attempt to work their cotton plantations as they do their farms in Illinois and Iowa?



Scene at a Louisiana Truck Farm.

The question under discussion is the comparison of cotton lands with Northern farm lands, as an investment. The above question is not, therefore, pertinent, but it is a common one and should be answered.

It is hard to determine why, but it is a fact, that the negro is especially adapted to growing cotton. It is also a fact that the climate in which cotton grows most successfully is peculiarly adapted to the African race. Under such conditions, with plenty of negroes to perform this labor, it seems fitting that such work be assigned to them. We would not be understood to urge that the Northern white man cannot plant and cultivate cotton equally as well as the negro, nor would we even intimate that they cannot withstand the scorching sun of a cotton climate; but experience has shown that the negroes of the Mississippi Valley are the natural producers of cotton, and the Northern farmers gets better results when he recognizes this fact, and employs them, either as tenants or laborers, to do such work.

In the discussion of this question, the writer has had but one thing in mind, viz.: to convince Northern land investors, such as bankers, lawyers, railroad men, real estate agents, and others having means to invest in farms, that the cotton plantation in the Mississippi Valley is a better investment and promises larger returns on the money invested, than Northern farms; that the original investment in a cotton plantation is less than half that in a Northern farm of the same size; that the annual cost of maintenance is not one-tenth that of the Northern farm; that rents are nearly double and even more secure in the South than in the North; and that the supply of tenants always exceeds the demand.

Real estate investments have made money for every investor throughout the Northwest, who has used any judgment in the selection of his lands. The same will be true of all who invest in cotton lands, improved or unimproved, in the Mississippi Valley, along the line of the Yazoo & Mississippi Valley Railroad between Memphis and Vicksburg. Low rates are made to points in this territory on the first and third Tuesdays of each month. A week or ten days is sufficient to make the trip and investigate the lands under discussion. We venture the prediction that within five years many Northern men, who live in the North, will own and rent cotton plantations in the Mississippi Valley, and that the net returns will justify all we have said concerning such investments. Naturally, the results will tend to attract Northern farmers who will locate there permanently, either on plantations, or in nearby towns.

QUESTION No. 6. How about markets for cotton?

The city of Memphis, adjacent to the lands under discussion, is the largest

interior cotton market in the South. Not only is Memphis a great cotton market, but it is one of the most enterprising cities on this continent. Without doubt, the census for the year 1910 will give Memphis a population of 200,000, possibly more.

New Orleans, the present industrial and commercial metropolis of the South, and destined to become one of six of the largest cities on this continent, is the greatest cotton market of the world, and is also very accessible to the Mississippi Valley. Indeed, the market facilities for cotton could hardly be improved. With lands as fertile as the Valley of the Nile, and market advantages unsurpassed, no one need hesitate in making investments in Mississippi plantations, along the lines of the Yazoo & Mississippi Valley or Illinois Central Railroads.

TRUCK FARMING IN THE SOUTH.

In this particular the attention of Northern gardeners and others is called to the possibilities of truck gardening in the South. Adjacent to large cities throughout the Northwest are found vegetable growers who devote their entire time, during the summer months, to growing truck for the city markets. Many of them do fairly well, but on account of the high price of lands adjacent to cities and exorbitant taxes that always obtain in such localities, they cannot afford to own more than one to five acres of land; and in a climate where only one crop is successfully grown in a season, it is impossible for such farmers to make more than a comfortable

living. In the South truck farmers do not spend all the money they make during the summer for fuel to keep them warm during the winter. Indeed, the annual expense for fuel in the South is comparatively nothing, and there is scarcely a month in the year when the truck farmers of the South do not have something that finds ready sale in Northern markets at remunerative prices.



Dairy and Truck Farm, Louisiana.

The writer will aim to answer, briefly, questions that naturally arise in the minds of Northern vegetable growers, as to truck farming in the South:

QUESTION No. 1. *What territory in the South is best adapted to Truck Farming?*

Nearly all the country in West Tennessee, Central Mississippi and Northern Louisiana, adjacent to the ILLINOIS CENTRAL RAILROAD, is adapted to the growing of vegetables, but the section of country where truck farming has been especially successful lies between Jackson, Mississippi, and New Orleans.

QUESTION No. 2. *What is the character of the soil in that locality?*

Formerly the country above referred to was covered with virgin pine forests, but the merchantable timber has long since been sawed into lumber, some of which may have been used in the Northern home of the reader of this circular. After the timber had been removed, the soil was regarded so poor that the lands were for years, considered as worthless!—indeed, \$1 per acre was the average price of pine lands in this locality, after the merchantable timber was removed. About twenty years ago, however, this apparently worthless soil, which was simply a sandy loam with a thin clay sub-soil, was found to be especially adapted to vegetable growing,

and as a result thousands of carloads of garden truck are annually shipped from this territory to Northern and Eastern markets.

QUESTION No. 3. *What is the present price of such lands?*

Much depends upon the nearness to a shipping station. Within the city limits of most of the towns between Jackson and New Orleans, lands suitable for gardening can be bought for \$25 per acre. The same quality of lands within three to five miles can be had at \$10 per acre, and in some localities at even less. At greater distances from town \$5 is about the average price.

QUESTION No. 4. *Do these lands require fertilizer?*

Indeed they do, and the kind of fertilizer that gives best permanent results is barnyard manure. Commercial fertilizer is used quite extensively and always gives good temporary results, but the vegetable growers, whose lands are constantly becoming better and richer, are those who keep a few cows and other stock and care for every pound of manure as they would for so much gold dust.

QUESTION No. 5. *What varieties of vegetables grown in the South are most valuable for shipment?*

Nearly every variety of garden truck can be grown successfully and profitably in the territory under discussion. It is in the South, however—as elsewhere—that some varieties are more profitable than others. Lettuce, beans, radishes, onions, tomatoes and cabbages are grown with profit. Some years the markets are not so good as others, but taking one year with another the net results are very satisfactory.

QUESTION No. 6. *About what is the average profit per acre on vegetables?*

It is hard to answer this question. Vegetable growers average about the same as other farmers. Some are careful in the preparation of the soil, in the cultivation of same, in the selection of seeds adapted to the soil and climate, and as a result they always get a much larger yield than the man who carelessly puts in his crop and trusts the Lord for results. At Hammond, Ponchatoula, Roseland and other points in Louisiana, may be found growers who have made from \$600 to \$1,000 per acre in cultivating lettuce; radishes, from \$100 to \$200 per acre; beans, \$125 to \$175. Cabbages, grown on drained swamp lands a few miles north of New Orleans, are so profitable that only a few years since one of these cabbage growers, on a few acres of land, made enough money in one season to take his entire family abroad.

QUESTION No. 7. *How about shipping facilities?*

New Orleans, a city of 350,000 inhabitants, and destined in the near future to become one of the largest commercial and industrial cities in the United States, is

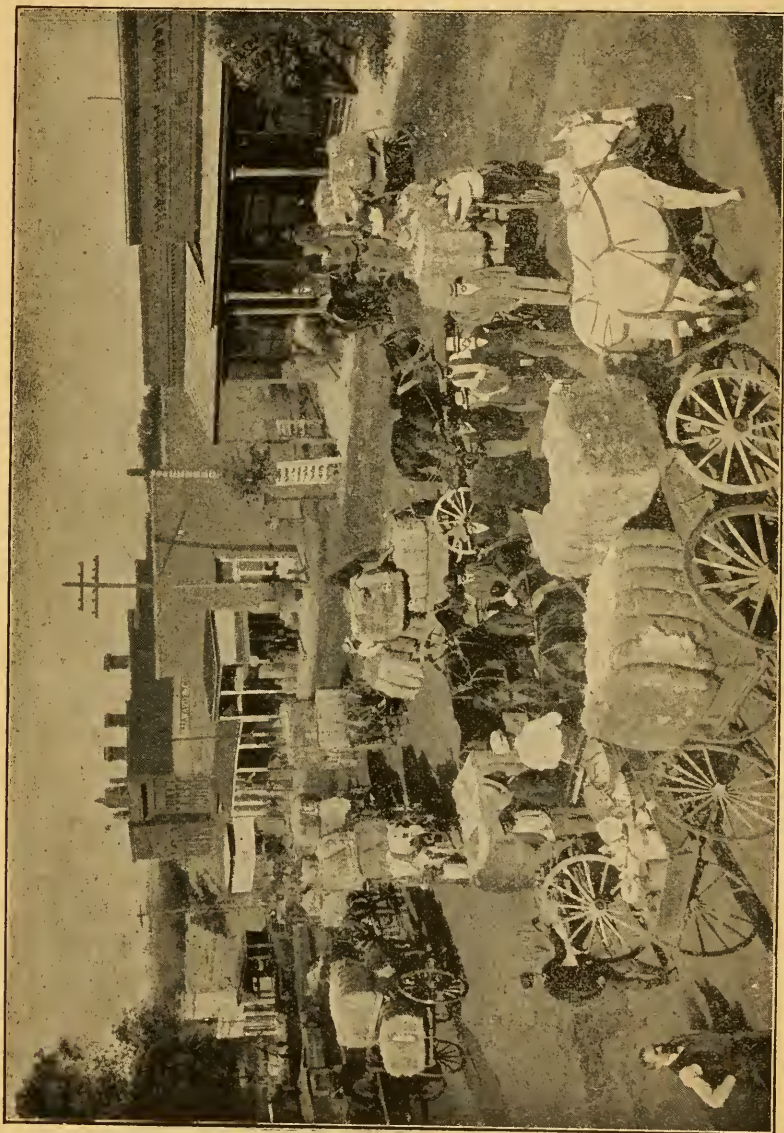
within easy reach of all the territory above described, and affords a daily market for every variety of garden truck. Twenty years ago it would have been impossible to handle, with profit, garden truck to Chicago and other Northern markets, but today the ILLINOIS CENTRAL RAILROAD COMPANY is running through fast trains of iced cars, on quick schedules, that handle perishable products, which they land in Chicago in nearly as good condition as the



A Cotton Scene in Mississippi.

local gardener within ten miles of Chicago, who carts his stuff from the garden direct to South Water street.

From the above it will be seen that truck farming in the South may be made profitable with a comparatively small investment. The writer contends that forty



Marketing Cotton in the South.

acres is about the size of an ideal Southern truck farm, the cost of which, if located near a railway, would be from \$500 to \$1,000. The cost of buildings, which would include a very comfortable Southern home, need not be to exceed \$1,000.

In other words, with a \$2,000 investment a Southern truck farmer may be thoroughly equipped for a successful and profitable business. Indeed, a truck farmer who thoroughly understands the business can do well in the South with \$1,000, or even less. He should keep a few cows, the milk from which will find ready market at every station where it is purchased, at good prices for shipment to New Orleans. He should have a nice patch of strawberries, and as many acres in vegetables as he can consistently manage.

We trust this pamphlet will fall into the hands of many practical truck farmers throughout the Northwest who will make it convenient to take advantage of *Home-seekers' Rates*, on the *First and Third Tuesdays of each month*, and visit the towns on the line of the ILLINOIS CENTRAL RAILROAD, between Jackson, Mississippi, and Ponchatoula, Louisiana.

FRUIT GROWING IN THE SOUTH.

QUESTION NO. 1. *Can apples be grown successfully in the South?*

As a rule, little attention is paid to the growing of apples in the South, except for home consumption. There are, however, two localities on the line of the Southern Division of the Illinois Central Railroad, where apples are grown for shipment, and quite successfully. We refer to the counties of Hardin, Larue and Grayson, Kentucky, only a few miles out from Louisville. The country in this locality is broken, and the soil a reddish clay, which is especially adapted to fruit growing. From Vine Grove, a small station in this territory, no less than 3,000 barrels of apples are annually shipped to Eastern and Northern markets; and what will astonish the reader is the fact that lands in this locality suitable for apple growing are in the market at from \$10 to \$20 per acre. West Tennessee is also noted for the quantity and quality of its large red apples, that are grown for shipment, and always find ready sale.

In the vicinity of Milan, Jackson and Dyersburg, Tennessee, may be found several large apple orchards, showing as healthy trees as can be found in any of the so-called apple states of the North. The state of Mississippi raises for home consumption several varieties of summer and fall apples; and even from as far south as Hammond, Louisiana, a Mr. R. J. Moore (formerly a resident of the fruit-growing section of Kansas), writes that he has grown good specimens of Ben Davis, Red Astrachan, Wolf River, Florida Jennings, and other varieties of apples on his place near Hammond.

It will be seen from the above that apples can be successfully grown in the South, but the writer does not regard the apple as a staple fruit, as it is in some of the more northern states. Nature has, however, generously favored the South with other fruits that are indigenous to that soil and climate.

QUESTION NO. 2. *Are peaches a sure crop in the South?*

Peaches cannot be said to be an absolutely sure crop, even in Michigan. But as a rule, in the South, peaches can be relied upon with a great deal of regularity, and in the early spring time, in nearly every portion of the South may be seen the beautiful pink peach blossoms, so attractive to the eye, and so full of promise for a rich harvest of the most delicious fruit that grows.

On a high point only twenty miles out from Louisville is what is known as Muldraugh's Hill, where, during the Civil War, a fort was established of which the earthworks and entrenchments are yet intact. Adjacent to this station the cultivation of peaches has become the chief industry, and it is said that Muldraugh's Hill peaches are the finest in the world, and command the highest prices in all Northern markets.

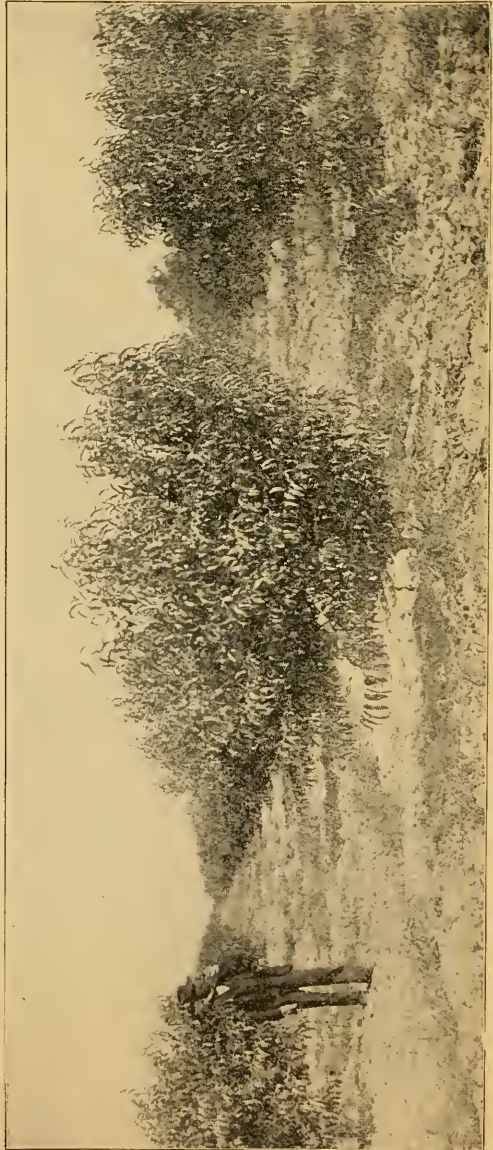
West Tennessee farmers all grow a few peaches for their own use, but, with very few exceptions, they are not grown for shipment.

The Experiment Station at Agricultural College, Mississippi, publishes the fact that the district lying between Durant and Crystal Springs, Mississippi, is especially adapted to peach growing, and as the Experiment Station is constantly studying the horticultural, as well as agricultural conditions of the state, it can be

regarded as an authority. As an evidence of the correctness of their findings, we refer to Ridgeland and Madison Stations on the line of the Illinois Central Railroad about midway between Durant and Crystal Springs. Ridgeland is a Northern settlement, the location of the Highland Colony Company, consisting of about one hundred Northern families engaged in cultivating peaches, and though the orchards are young (the colony being only six years old), the shipment of peaches from this one station the past season amounted to twenty carloads. Mr. C. B. Thompson of Ridgeland writes that from a young orchard, of thirty acres he picked 7,139 crates, that netted him \$3,072. Mr. Thompson regards the Elberta and Greenborough as the best varieties. Peach trees in that locality begin to bear when two years old. Mr. Thompson further advises that from ten acres of young Elbertas he shipped 3,200 crates that netted him \$1,900. No insects have interfered with the growth of the trees except the common grub worm, or "peach borer," and they work above ground, around the trunks of the trees. The peach tree always seems to thrive best on high ground, and in thin, red clay soil. When they can be had, wood ashes are used, and are considered decidedly the best fertilizer. In the vicinity of Ridgeland and Madison, the peach orchards now aggregate about 600 acres. Parties interested in peach growing should visit the above points in Kentucky and Mississippi, and they will be surprised to see how cheaply they can buy lands best suited to the cultivation of this fruit.

QUESTION No. 3. *How about strawberries?*

The South is unquestionably the natural home of the strawberry, and the delicious flavor of the Southern strawberry is not found anywhere else in this country. Not only is the quality of the best, but the



Fifteen Months Old Peach Orchard, Ridgeland, Mississippi.

quantity is surprisingly large. The Southern berry grower has another advantage over his brother of the North, and that is in getting his berries into market early. From Louisiana and southern Mississippi, berries are frequently ready for market during the month of March, and shipments continue until June, or until such time as the Northern markets are so glutted as to make it unprofitable to ship them so far. From northern Mississippi, western Tennessee and Kentucky, shipments are usually two or three weeks later than from Louisiana points.

The following statement will interest every strawberry grower: From Durant, Mississippi, no less than thirty-two carloads of berries were shipped by freight during the past season, and ten carloads by express, making a total of forty-two carloads during the past season. Madison, Mississippi, shipped fifty carloads. Madison was the home of Dr. McKay, deceased, who for years was the largest strawberry grower in the South, and earned the title of "Strawberry King." He was largely responsible for the rapid development of the fruit industry of the South. His children are now engaged in strawberry culture, but not on so large a scale. We have not the figures at hand as to the number of carloads shipped from Ridgeland, but it is said that at least \$20,000 was paid out at this point for strawberries sold on track, besides shipments to different markets. The three varieties that seem to be regarded with most favor on account of size, firmness and flavor, are the Lady Thompson, Excelsior and Klondike.

But of all the stations from which shipments of strawberries are made, Independence, Louisiana, is, no doubt, entitled to the blue ribbon for having shipped the greatest number of carloads the past season. The agent's report from that station gives the incredible number of *one hundred full carloads*. The writer remembers very pleasantly a visit to Dr. Buck's strawberry patch at Independence years ago, when strawberry growing was in its infancy in Louisiana, and judging from the shipments from that station this season, Independence has reason to feel proud, not only of the quantity of berries, but of their quality, which is of the highest.

Roseland, Louisiana, is another northern settlement whose people are engaged in fruit growing and gardening. The shipment of berries from that point the past season amounted to 1,744,400 pounds.

Hammond, Louisiana, is still another Northern colony, where at one time more strawberries were grown than any point on the line of the Illinois Central; but of late, dairying and shipping milk to New Orleans has superseded strawberry growing to a certain extent, but the conditions for growing berries at this point are as favorable as ever, and the following information from Mr. R. J. Moore will be of interest to strawberry growers generally. He says: "Strawberries will grow in any soil about Hammond, either sandy, heavy clay or black loam;" that he has experimented with all of them; that the sandy soil "is preferable on account of the earlier ripening of the berries." Mr. Moore thinks that to get best results plants must have plenty of water and plenty of fertilizer. The varieties he is partial to are Moore's Diamond and Lady Thompson. The cost of picking berries at Hammond is one per cent per pint. Fertilizer costs about \$9 per acre, and the amount net per acre realized from berries, one year with another, is from \$100 to \$300. Frequently strawberry plants are put out in August, after a crop of cucumbers or some other vegetable has been harvested. Mr. Moore advises that this season he realized \$899.07 from three and one-half acres of berries.

Ponchatoula, Louisiana, has an excellent soil for strawberry growing, and her shipments this year amounted to 205,095 pounds.

From the above it will be seen that the entire country from Durant, Mississippi, to Ponchatoula, Louisiana, is especially adapted to the growing of this fruit.

QUESTION No. 4.—*What is the present price of lands between Durant and Ponchatoula, suitable for strawberry culture?*

The lands usually devoted to strawberry growing in the territory mentioned are those from which the pine timber has been cut, and which, up to the time of successful experiments with fruit and vegetable growing in the South, really

had no value. Not being sufficiently fertile to grow cotton, corn or cane, \$1 per acre was for years the uniform price for pine lands from which the merchantable timber had been cut. Today, however, these lands have a value, and if located within the corporate limits of some good town, the price is about \$25 per acre; outside the town limits, but adjacent thereto, from \$10 to \$15 per acre. Within this territory, however, are many small stations like Independence, Louisiana, from which one hundred cars of berries were shipped this season where lands within three miles of the railway station can be bought for \$5 per acre, and by going still farther from a station the prices are even less than \$5—probably \$2.50 or \$3.50. There is this to be said, however, that berries, in order to reach Northern markets in the best possible condition, must be delivered at the station and placed in the car with just as little bruising as possible. For this reason, a berry farm should be within quick and easy reach of the shipping point.

QUESTION No. 5.—*Is there any difficulty in the South in securing help during the picking season?*

The same conditions prevail in the South, so far as help is concerned, as in the North. At times berry growers find it difficult to get all the pickers they may need for a particular day, but as men, women and children seem to enjoy this work, there has been no serious trouble or loss of berries that has come to our knowledge, on account of scarcity of help. It should be remembered that the season for picking berries in the South is much longer than in the North. The writer has known of a crop in the North ripening and being picked in two weeks, while in the South they continue to blossom and ripen for two months, and in some cases it has been even three months from the time of the first to the last picking. Ripening slowly, as they do in the South, not so many pickers are required to do the work.

QUESTION No. 6.—*Are all shipments of Southern berries made to Northern markets?*

No, not all of them. The early shipments, however, are usually made to Chicago, St. Louis and Cincinnati, as they often reach these markets before the snow and ice have disappeared, and are such a luxury that they bring exorbitant prices. The Southern markets get only a small percentage of the early berries, but later in the season, when the berries will not stand long shipments, or when prices in the Northern markets are too low to ship with profit, the Southern markets get nearly all of the shipments. The Illinois Central Railroad Company, appreciating to the fullest extent the necessity of having fruit and vegetables grown on its line reach Northern markets in the best possible condition, has not only provided the best of refrigerator cars, but, during the season, runs fruit trains from New Orleans to Chicago, shipments being picked up from all stations, say within one hundred miles, and from the last point the train is run through to Chicago on fast schedule, stopping only for coal and water, and at certain points for re-icing. In addition to its system for handling perishable products en route, the "Central" has a storehouse or fruit warehouse at Chicago in which fifty cars can be quickly handled at one time.

The question of fruit growing in the South is an important one. So much so that we have been able in a brief way to mention only three kinds of fruits, viz.: apples, peaches and strawberries. It must not be understood, however, that these are the only fruits that can be successfully grown in the South. Figs are grown in Louisiana with great success. Certain varieties of pears do fairly well. Muscadine and Scuppernong grapes are to be found everywhere in the South. Japan and other varieties of plums are grown for home consumption. Blackberries, dewberries and mayhaws grow wild, and every housewife must have a supply of jam made from these wild fruits.

STOCK RAISING IN THE SOUTH.

The HON. JAMES WILSON, Secretary of Agriculture—in a recent article in "The Southern Planter" published at Richmond, Virginia—gave expression to the follow-

ing statement concerning stock raising in the South: "What the South needs is the introduction of more domestic animals on every Southern farm." And he further remarks that after years of observation and study of animal industry in the South, there are many domestic animals that can be raised quite as well in that particular section of the country as anywhere else. He was careful to emphasize the fact that at the present time, throughout the world, there is an unprecedented demand for just such horses as only Southern people know how to produce and train. He also urged that the South can, and should, supply early spring lambs for all Northern markets; that dairying ought to become one of the leading farm industries of the South; that the old-time smokehouse, found on every Southern plantation before the war, and in which was smoked the finest hams that ever graced a breakfast table, ought to be restored; and that the fine bacon hog, for which some portions of the South have become noted, ought to be more extensively raised in every state south of the Ohio river.

Secretary Wilson is a man of large experience and wide observation. He would never have made these statements did he not believe and know that the conditions were favorable for successfully carrying them out. The departments of Animal Industry connected with the Agricultural Colleges of Kentucky, West Tennessee, Mississippi and Louisiana, are giving special attention to the growing of grasses and forage crops, and are experimenting with every variety known to a semi-tropical country, with a view to furnishing reliable information that will be of incalculable benefit to every stock raiser.

Northern farmers understand that the value of stock raising cannot be measured alone by the net profits from the sale of stock. There are other indirect benefits that are not applicable to any other farm industry. We refer more particularly to the matter of fertilization. The farm on which cotton or wheat is grown for a term of years becomes poor and non-productive. In the Southern states may yet be found a good deal of worn out cotton land that can only be resuscitated by stocking the farm with cattle. Our Northern readers will, therefore, keep in mind that many of the low-priced lands in the South may become valuable through the introduction of domestic animals that will consume the native grass and the great variety and abundance of forage so cheaply and so quickly grown on these old and apparently worthless plantations.

The South may never be able to compete with some of the natural grazing states of the West, but the time is not far distant when every Southern planter and farmer will raise his own horses, mules, cows and hogs, and will thus reduce to the minimum the expense of maintaining a Southern farm.

QUESTION No. 1.—*Is stock feeding in the South practicable?*

Until quite recently no attempt has been made to feed cattle in the four Southern states under discussion (that is, with a view to supplying Northern markets with Southern beef), except, perhaps, in a few instances in the state of Kentucky, where the conditions are all favorable; and in Mississippi, where a few large herds have been shipped in from Texas and fattened on the by-products of cottonseed, such as cottonseed meal, oil cake and cottonseed hulls.

During the month of July PROF. ANDREW M. SOULE, Vice-Director of the Tennessee Agricultural College, compiled a bulletin entitled, "Feeding Native Steers," in which the subject is thoroughly handled, and the results given of actual experiments made at that station. We cannot publish in a brief circular even a synopsis of the statements made by Prof. Soule, but we quote a few lines of what he says in a general way concerning the raising of beef cattle in Tennessee:

"Our farmers spend about \$1,500,000 annually for fertilizers. There are in round numbers 1,000,000 head of cattle of all classes in the state. The droppings from a single beast, according to the results obtained at a number of experiment stations, are worth about \$20 a year, so that an appalling waste is going on when one considers how insignificant an amount of stable manure is being utilized

on our farms. If only one-fifth of the value of the droppings of the cattle held in the state was utilized as it should be, it would wipe out the fertilizer bills now incurred by our farmers twice over. These figures indicate how very important it is that the cattle now grown in the state be retained and finished within its borders. It is quite evident that the foreign buyer must make a profit on these cattle, or else he would not continue to purchase them. Reliable information shows that many of the cattle now sold out of the state go to Pennsylvania and Maryland and other Northeastern states for winter feeding. It is evident to one familiar with the topography of the country that it is not possible to produce crops for cattle feeding of a better variety and character, or on a more economical basis in Maryland and Pennsylvania than in Tennessee, and it is also well established that the man who places a highly finished animal on the market derives the greatest profit therefrom. That beef cattle can be grown in the state to the material advantage of the farmer, is shown by the fact that properly finished cattle topped the market in Louisville last winter on several occasions, and recently some 98 head were sold by a Knoxville feeder for export to Scotland. As the industry, comparatively speaking, is in its infancy, it is not to be expected that great success in cattle feeding will be achieved all at once by our farmers. It is a business which requires the exercise of good judgment and the closest personal attention, and so it will take time to properly develop it."



Picking Strawberries at Hammond, Louisiana.

Prof. Soule refers, of course, to conditions that obtain in Tennessee. It is fair to say, however, that his statement is applicable to many of the other Southern states, and while he does not mention in glowing terms that stock feeding in the South is especially profitable, he does furnish food for reflection; and any person who would know the details and actual results of his experiments in "Feeding Native Steers," should address him at Knoxville, Tennessee, and request a copy of his bulletin upon that subject.

QUESTION NO. 2.—*Is it true that stock in the South need not be fed or sheltered during the winter months?*

No, it is not true. Such treatment would be a positive cruelty, and there is no excuse for it. There is hardly a farm or plantation in the South that does not, or may not at least, grow a sufficient amount of native hay or fodder to furnish an abundance of coarse food for every head of stock on the farm during the winter months. Neither is there any excuse for stock in the South not being sheltered. While we are having our cold winter blizzards the South is having cold winter rains, and one is about as hard on stock as the other. Timber, lumber and labor are cheap throughout the South, and when our Southern farmers understand, as do our Northern farmers, that every needed barn or shed placed upon the farm not only adds to its attractiveness, but to its selling value at least fifty per cent more than the cost of the improvements, they will pay more attention to these needed shelters for stock from December to April, and thus do away with the false theory that stock in the South need not be fed or sheltered during the winter months.

QUESTION NO. 3.—*Is it safe to ship stock from the Northwest to the Southern states?*

This question is often asked. The experience of Northern farmers who have shipped stock from the Northwest to the South is that a percentage of loss attends such shipments of horned cattle, but that calves and horses rarely ever suffer to any extent, provided care is exercised in feeding same, and the stock is not allowed to graze during the early spring time. We are inclined to the opinion that immigrants from the extreme Northwest to the extreme South run little risk in shipping their horses, but would advise that the cattle be sold and purchases made in the South, of stock already acclimated.

QUESTION NO. 4.—*How about hog raising in the South?*

There is not a Southern state in which the hog does not thrive. It is true that in some the conditions for breeding and fattening hogs successfully are better than others, but throughout the South on nearly every farm may be found the native hog. Much has been said and written about the Southern "razor-back" not especially complimentary, and yet all must admit that the sweetest bacon is grown and cured in the South. Prof. Soule, of the University of Tennessee, has the following to say concerning this important industry:

"Some of the more important reasons why swine husbandry should prove especially attractive to Southern farmers are summed up in the following paragraph: First, there is a mild climate so that the hogs require but little housing. There are springs and running streams of water everywhere, a splendid natural range and an abundance of mast in the large forest areas still existing in the state. Corn and other cereals so commonly and successfully used in the production of pork are easily and cheaply produced, and a variety of forage crops, including the clovers and many other legumes, thrive remarkably well. Rape, the plant which has been successfully used for hog production throughout the Northern states, but whose qualities we are only beginning to appreciate, takes kindly to our soil and climate. Red clover finds in our red clays a natural heritage. Sorghum, soja beans, hairy vetch, artichokes, the velvet bean, the cow pea and Spanish peanuts all thrive well singly and some of them in combinations, producing as rich and fine mixtures for hog pastures as can be produced anywhere.

"According to the census of 1900, there were 63,297,249 hogs in the United

States. Of this number 1,885,000 were found in Tennessee. The population of Tennessee is about 2,020,000, so that there is less than one hog owned for each citizen. Tennessee leads all the south Atlantic and south Central states in the number of hogs held on farms, with the exception of Kentucky. The number of hogs held on Southern farms is therefore inadequate to supply the needs of the population. At the present time the South is paying a heavy tribute to the farmers of the central west for hog products, and this in the face of the finest natural environments for pork production, in spite of the possession of a splendid home market and the ability to produce the highest quality of pork at a very low cost. Surely the outlook for the development of swine husbandry in the South is very bright. The population of the United States in round numbers is 76,500,000 and rapidly increasing. The market for pork products at home and abroad never was better than it is today. There is less than one hog held on the farms for each citizen, and especially is it true of the South. The Southern farmer ought to supply his home markets with their meat; he ought to have more hogs to sell, and keep at home the millions of dollars now annually sent North for hog products."

The following, from COL. CHAS. SCHULER of Keachie, Louisiana, explains in detail a successful and profitable method of hog raising in the South:

"Hog raising can be successfully followed in Louisiana, and has been a success on my farm for thirty-two years. The common expression 'that you must have a hog that can outrun a nigger,' is all stuff and nonsense. I cultivate about eight hundred acres, use altogether negro labor, and cannot remember ever having a pig or hog stolen. I raise hogs in connection with my main money crop—cotton. I usually kill from fifty to seventy-five head each year, averaging from one hundred and fifty to two hundred pounds net per head. I use thoroughbred males, changing them every two or three years. I kill on the farm, and sell surplus to merchants and customers in the city. Never have trouble in realizing cash for hog products. Have kept dry salt meats (sides) from hogs killed in December, perfectly sweet and good until the latter part of May. After that time I would advise smoking. Have kept, and exhibited at county fairs, hams that were eighteen months old after killing, perfectly sound and sweet. The fact is that the Louisiana hams, as cured by me, have a reputation for good quality, equal to any ham made in this country. I prefer killing on the farm to selling to packers, because owing to the price that we can realize for corn, it is much cheaper to raise hogs the way I do than to fatten at all times of the year. I claim that by adopting my methods, and charging the hog up only with the labor of producing the food, letting him do his own harvesting, that gross pork can be raised in this climate at not much over one-half cent per pound.

"Now as to method: I want my sows, as near as possible, to have two litters of pigs each—the first about the last of August or the first of September, the second about the last of March. Everything born before the first of April goes to the smoke house the following winter.

"As to the matter of feed: I have pastures containing Bermuda and native grasses, with plenty of water; containing also forest trees for shade and acorns. For winter pasture I sow oats and vetch in October. I also feed, during winter, such nubbins of corn as would be unfit to feed to my work stock. In March I sow early amber sorghum broadcast, for pasture. It will come in about the latter part of April, and it is astonishing the number of sows and pigs that can be kept in a growing and healthy condition on a few acres of sorghum. The latter part of May brings in the oats. Let the hogs harvest all you don't want for your work stock. June will bring in the early sugar corn. Let the hogs get ear, stalk and all. Latter part of June and July come in the peas—the Whippoorwill and other early varieties. Then commence crowding the hogs you expect to kill in the fall and winter. In July your roasting ears—stalks and all—with peas sown broadcast in it, will come into play. In August the Spanish goober, or peanut, which will permit you to cut

a good crop of hay, and besides furnish you the best of hog food at comparatively small cost, will come in; and that, with sorghum sown in drills, will be ideal food and run you through September. In October and November the sweet potatoes, second planting of Spanish peanuts, and later on running varieties of peas come in. In December turn your hogs in your oat field, which has been planted in Mexican June corn, peas, sweet corn and Spanish peanuts, and you can wind up your hogs ready for the slaughter pen, and kill them whenever the temperature gets down to 35 or 40 above freezing.

"You will see from the above that I let my hogs do their own harvesting and eat such food, and in such quantities as they like best, always giving them access to plenty of grass and water. You will also notice that my main dependence for fattening is on the peas and Spanish goobers, which are both soil restorers and are easily and cheaply grown.

"As to loss from disease, I would say that if ordinary sanitary precautions are taken, there is very little loss."

Col. Schuler has had more than thirty years' actual experience in hog raising in Louisiana. He is a member of the State Board of Agriculture, and a planter of more than state wide reputation. His testimony as to "Hog Raising in the South" is, therefore, thoroughly reliable.



Dairy Scene at Hammond, Louisiana.

DAIRYING IN THE SOUTH.

It is difficult for dairymen of the North and East, accustomed to blue grass and timothy pastures, and red-top and clover meadows, to understand how it is possible to carry on the dairying business successfully in a country with a semi-tropical climate, and where tame grass pastures and meadows are practically unknown. The object of this circular is to show that successful dairying in the South is not wholly dependent upon conditions that are absolutely necessary to success in the more Northern and Western states.

The South produces a greater variety of forage plants than can possibly be produced in the North, furnishing two and often three crops per year. The Southern dairyman, by sowing turf oats, hairy vetch, or alfalfa, during the months of August or September, may have excellent winter pasture, giving him a decided advantage over his brother dairyman of the North, whose cows, at that season of the year, instead of pasturing in the open air, are housed in warm basements and fed upon ground feed and dry hay.

The South not only has a great variety of forage plants and native grasses, insuring ample food provisions for both winter and summer, but it also has what is necessary to successful dairying—plenty of pure water. DR. WM. C. STUBBS, Director of the Louisiana Experiment Station, says: "Nowhere on earth is there such an abundance of running water as in the Southern States. The Appalachian chain of mountains precipitates its rainfall on the east into the Atlantic ocean, and on the west and south into the Gulf of Mexico, through many streams. Springs abound in many sections, and creeks and brooks permeate nearly every farm. Artesian wells, at a nominal cost, may be had by every Southern dairyman. Indeed, the water supply for stock, throughout the South, may be considered nearly perfect."

QUESTION NO. 1.—*What branch of dairying is most profitable in the South?*

MR. HENRY E. ALFORD, Chief of the Dairy Division U. S. Department of Agriculture, Washington, D. C., who is an acknowledged authority on the subject, has answered this question in an article in the "Southern Planter." I quote from him as follows:

"The branch of dairying which offers the most immediate and surest profit, in the Southern states, is undoubtedly that of producing milk for the supply of nearby cities and towns. Although almost every locality has some sort of milk supply already, the business is, as a rule, very unsystematically and insufficiently done. There are in the South hundreds of places, if not thousands, where the supply is unsatisfactory in quality and uncertain and irregular in quantity. The whole service is susceptible of very great improvements, and it is morally certain that a rich reward awaits the man or men who will intelligently and energetically occupy this field and really satisfy the wants of the community.

"The greatest profit will accrue to those who go at once to the top and aim to secure the cream of the trade by adopting the most approved methods, and offering consumers, at fair prices, better milk than they have previously been able to procure, uniform in its high quality, safe because pure, delivered in attractive form and in condition to ensure good keeping properties. The large cities and towns offer the best opportunities, the very best being towns of industrial activity, which give promise of healthy growth and the steady increase of a population obliged to buy its food supply and with money to pay for it. A man who will locate within easy reach of such a town and make market milk, prepare it and sell it, according to the best of modern methods, is about as sure of success as in any line of agricultural effort anywhere in this country.

"There are, besides, many places both large and small, where by very moderate effort and without any radical change of system, the local milk supply can be vastly improved and consumption greatly increased, by simply making this business a specialty, offering good, clean milk, regularly and well delivered."

Prof. Alford is unquestionably right in his statement that supplying cities and towns with pure milk is the branch of dairying that offers surest profits in the Southern states. And he might have added that the conditions on the line of the Southern Division of the Illinois Central Railroad are especially adapted to this class of dairying, inasmuch as there are on this line three large cities, viz.: Louisville, Kentucky; Memphis, Tennessee, and New Orleans, Louisiana—cities that are rapidly growing in population, in commercial importance, and now having an unprecedented industrial development. These cities consume daily, vast amounts of dairy products, and, could they be assured that a high grade of milk would be furnished, the consumption could be easily doubled.

QUESTION NO. 2.—*Are Northern men, now located in the South, engaged in this branch of dairying; and if so, with what success?*

At Hammond, Louisiana, a point on the Illinois Central Railroad fifty-two miles north to New Orleans, where, within a radius of five miles, about two thousand Northern people are now located, quite a little attention is being paid to shipping milk to New Orleans. Indeed, if one happens to be at Hammond at the hour for

morning shipments, he is reminded, by the array of milk cans, of some of the noted points in Illinois, Ohio and New York, where shipping milk to nearby cities has for years been regarded as a most profitable industry. At Roseland, Louisiana—another Northern colony of several hundred people—quite a number of farmers have found it profitable to keep a few cows, the milk from which is shipped daily to the city of New Orleans.

QUESTION No. 3.—*What price is paid for milk delivered at the station?*

The price varies at different seasons of the year. A fair average price is about thirteen cents per gallon, and what is said of prices for milk shipped to New Orleans is practically true of Memphis and Louisville.

QUESTION No. 4.—*What feed is most popular in the South?*

In addition to the native grasses that are abundant everywhere, we find, especially at Hammond, that dairymen are using a combination of cotton seed hulls, cotton seed meal and corn in about equal parts, at a cost of about eight to ten cents per day for each cow.

PROF. MOORE, of the Mississippi Agricultural College, has published the following concerning winter dairying in the South, and the feeding of cows for several weeks after calving:

"Winter dairying furnishes profitable employment at a season of the year when other work is not pressing and dairy products bring a higher price. More time can also be given to the raising of the calves, and less trouble will be experienced from the heat, sour milk, diarrhoea and flies, than during the summer, and the calves can go from skim milk to good pastures when they are just old enough to make the best use of them. The feed and care of the cow for the first three months after calving will largely determine the amount of milk and butter the cow will produce during the year. At the time of calving the cow should be fed light, laxative feeds, such as wheat bran, and all the hay and water she wants. As soon as she has recovered from calving, the feed should be gradually increased until the full limit of profitable feeding is reached. We usually take from two to three months to get the cow on full rations. After the cow begins to decrease in her flow of milk, the ration should be reduced. In the feeding of a herd of dairy cows, the judgment of the feeder must always play a very important part, and the best results will be secured by those who change the rations to suit the taste and requirements of the individual cow."

PROF. A. M. SOULE, of the Tennessee Experiment Station, has published in bulletin form, an article entitled "The Relative Value of Protein and Cotton Seed Meal, Cow Pea Hay and Wheat Bran." We quote from his article as follows:

"Feeding the dairy cow would be a comparatively easy matter were it not for the difficulty experienced in securing a sufficient amount of protein to supply the heavy demands made on her system in the production of milk. Cheap and abundant fodder crops can be grown with comparative ease to supply the more bulky part of her ration; but the protein needed is much harder to provide in a desirable form at a price within the reach of the average dairyman. The abundance of cotton seed meal in the South should offer a happy solution of the difficulty, but there are many places where freight rates make cotton seed meal quite as expensive as in the states of the far Northwest; and then it frequently happens that the dairyman does not see his way clear to pay out a large amount of money for cotton seed meal, for, as the old axiom puts it, 'A dollar saved is a dollar made.' So it is to his interest to discover if possible a means by which he can produce the needed protein on his own farm, and thus save the heavy drain on his resources required by the purchase of cotton seed meal or some other concentrate rich in protein.

"In the sections where cotton seed meal is particularly abundant and so comparatively cheap, the present investigation may seem to have but slight application, but the reader must remember that the best results in feeding dairy cows come from a combination of concentrates, rather than from the exclusive use of one,

no matter how rich that may be in the elements most needed for the economic production of milk. Cotton seed meal has now been fed long enough to establish its virtue as a feed for dairy cows, but it has also been shown that it is unwise to employ it exclusively for that purpose, as it is so rich, not only in protein but in fat and in other constituents as well, that it has a tendency to produce various nervous derangements of the cow's system, entailing serious losses that could easily be avoided if the meal were employed in a more rational manner. The present investigation, therefore, has a much wider application and a more general interest than would at first seem to be the case.

"It now becomes important to discover what crops may be grown on the Southern farm to supply protein abundantly and in an economical manner. Fortunately, the Southern soil is adapted to the culture of several of the most important legumes known to mankind. Among these, the one that stands out prominently, is the cow pea. It is well adapted to every section of the South, and can be utilized in more ways than any other legume, and besides making a most excellent hay, rich in protein, it has the power of materially improving the mechanical condition and the crop-producing power of the land, an item of the most profound concern to the Southern farmer, who has been somewhat careless with regard to such matters, and has sold his cotton seed to the oil mill because of its ready cash value, though failing to return to the soil in some other form the equivalent of the plant food thus removed. As a result, the fertility of much of our land has been seriously impaired, and so it is a particularly happy coincidence that the cow pea can be employed to rehabilitate the soil, produce a hay rich in protein, which combines most happily with cotton seed meal as a feed for dairy cows, and can even be used to advantage as a substitute for wheat bran or cotton seed meal under certain conditions."

QUESTION No. 5.—*Are there any successful creameries in the South?*

Yes; a few creameries, located in communities where there are a sufficient number of cows, and where other conditions are favorable, have been fairly successful. But the creamery industry languishes in the South, for the reason that, as yet, few communities have a sufficient number of cows to make it profitable; and, until the farmers of the South increase their herds, it is generally believed that the "Cream Separators," such as are now in use throughout the sparsely settled portions of the Dakotas, are more economical, and better adapted to Southern conditions. The writer, a few months since, while traveling through South Dakota, was surprised to learn that farmers seventy miles west of Aberdeen, who had from five to twenty cows each, owned cream separators at a cost of \$75 to \$100, shipped their cream to a firm at Aberdeen, and were pleased with the results. There is certainly no reason why Southern farmers should not have their cream separators, and when enough of them engage in this business, some enterprising creamery man will be found who will locate at a central point, and purchase the cream and convert it into butter. In discussing the question of hand separators, the "Nebraska Dairy-man" has the following:

"There have been discussions galore concerning the merits and demerits of the hand separator gathered cream method of conducting the creameries. The fact that so much has been written and said on this subject, indicates the interest that is being taken by various parties. The manufacturers of separators would rather furnish 500 hand separators for use of creamery patrons than to furnish three or four of the power machines. Naturally there is a larger margin of profit in the greater number of smaller machines than in a few of the larger ones. From their standpoint in a commercial sense, the hand separator ought to prevail and will.

"We have reference particularly, in speaking of the farmer or patron who has the small dairy of from five to ten cows. The farmer with a larger dairy does not look upon it with quite as much favor. He does not see as many advantages as the smaller farmer. Another feature, and one which we believe will have a much

greater influence than any other one factor in increasing the number of hand separators sold, is that it puts the smaller farmer with the five or ten cow dairy on the same plane, as far as getting the return from the product of his cows, as the dairyman with the larger herd of from twenty or fifty. He receives the same price per hundred for his butter fat from his five or ten cows as does the farmer for his butter fat from the twenty or fifty cow herd. The skim milk is worth just as much in proportion for feeding purposes as the larger, and his location, whether it be near or far from the factory, is not a drawback. The cream is taken from his own door and he has no difficulty in securing a customer for his cream, although he may be ten or fifteen miles from the nearest creamery, and possibly one hundred.

"This special feature of the hand separator gathered cream system is one that will be considered more and more, by farmers, in what might be called the outlying territory of the dairy districts. They are not inclined to keep more than enough cows to supply their own needs as they have no market for their product, except what they may get for their butter made in the old-fashioned way with poor facilities, and sold or traded at very moderate prices that hardly pay for the labor of preparing it. It does not take a large amount of eloquence or good fellowship to convince the farmer under these conditions that the hand separator is his salvation. Once he has installed his separator and has received his check for the month for his cream, he becomes enthusiastic and is an advocate of the hand separator system, and does missionary work among his brother farmers. This accounts largely for the growth of the hand separator system where once it gets a foothold.

"These two special features of the hand separator system, it seems to us, must and will increase and enlarge the demand for hand separators for this purpose more than any other special feature connected therewith."

It is suggested that the readers of the foregoing who may wish for further and more detailed information, open up a correspondence with one or more



Lespedeza—Estimated Yield, Three Tons Per Acre.

of the Directors of the Experiment Stations of the different states which are located at Frankfort, Kentucky; Knoxville, Tennessee; Agricultural College, Mississippi;

Baton Rouge, Louisiana. The gentlemen in charge of these stations are constantly making agricultural experiments and the results of their investigations may always be considered authentic and reliable.

GRASSES AND FORAGE PLANTS.

A request is made for some information as to the kind of pastures used in the South, the varieties of grasses and other forage plants for hay, and as to whether there are any crops successfully grown in the South that compare with the timothy meadows and pastures of the North. This request we consider a reasonable one. In pursuance of it, we shall try to give in this circular the facts relating to a few of the grasses and forage plants in the states of Kentucky, Tennessee, Mississippi and Louisiana.

QUESTION NO. 1.—*What grasses and forage plants succeed best in Kentucky?*

Kentucky is noted everywhere for her splendid fields of blue grass, and, fortunately, this, like some of her other products, has not been confined within the state limits, but has "run over," so to speak, into other states. Even Iowa is indebted to Kentucky for her thousands of acres of blue grass pastures. Clovers of different varieties grow luxuriantly, especially in western Kentucky. Mr. H. Garman, of the Agricultural College of Kentucky, located at Lexington, has the following to say concerning the grasses and forage plants of his state:

"Kentucky produces her fair proportion of the forage product of the United States. She is just within the wheat belt, and while this is not her characteristic crop, some regions of the state are largely occupied with wheat growing and produce a winter wheat of very good quality. Oats do not thrive as generally here as in some other states, yet the crop is not a small one (1,725,596 bushels in 1898), and at times the quality is first-class. Barley and rye do well in the state. Most of our soils produce excellent corn, which is the leading forage crop. It is grown in every one of the 119 counties, the lowest yield, in 1898, according to our State Commissioner of Agriculture, being 32,380 bushels, while five counties produced more than a million bushels each. Sorghum grows well everywhere, and is employed both for green forage and for making syrup. Timothy, clover and orchard grass are extensively grown for meadow, 361,696 tons of hay, mostly of these grasses, being produced by Kentucky in 1898, and in addition 142,875 bushels of grass and clover seeds were harvested. The fame of Kentucky does not rest on any of these products especially. It is her blue grass pastures that give her standing in the world, and their charm that gives the state its peculiar hold on the affections of those born and reared upon her soil. The phrase 'Down in Old Kentucky' conveys to the wandering Kentuckian a picture in which are sunny slopes of soft green grass; grazing horses and cattle, sleek and beautiful beyond the belief of those who have not seen them; together with memories of humming bee, and piping lark, and smell of clover and locust blossoms. Blue grass Kentucky is a delightful bit of the world in May and June; and all that her children say and believe of her, and more, is then true. And it is largely the result of the profusion with which the little plant, blue grass, grows in her limestone soil. If it grew everywhere in the state as it grows here about Lexington, we should have little occasion to discuss forage plants. But Blue Grass Kentucky includes only about one-fifth of the area of the state, and outside this section we have yet much to hope and labor for in the matter of forage for stock."

QUESTION NO. 2.—*Does timothy grass thrive in Tennessee?*

The Agricultural Experiment Station of Tennessee, located at Knoxville, issued a pamphlet in 1898 devoted exclusively to Grasses and Forage Plants of that State.

We quote from this pamphlet the following, as a complete answer to this question:

"Timothy is a perennial grass and grows best upon a moist, tenacious, rich soil. It does thrive on high, dry or sandy lands, however fertile they may be. The best situation is valley land having a soil rich in calcareous matter and humus, not too loose or friable, but with a suf-



First Cutting Alfalfa. Was Cut Five Times During the Year.
Yield, 7,660 Pounds.

ficiency of clay in its composition to make it reasonably compact. Timothy starts slowly in the spring and it does not take so rank a hold upon the soil as many other meadow grasses do. It is not suited for pasturage, for it has little aftermath and the tramping of stock soon destroys it.

"In general, it may be said that the conditions most favorable for the growing of timothy hay are: (1) A rich, tenacious, calcareous soil with some humus; (2) a situation where moisture is retained in the soil throughout the growing season, but in connection with good drainage.

"After the selection of a suitable soil and situation for the growth of timothy, the land should be well and thoroughly broken. The depth of the plowing must be regulated by the depth of the soil. On deep, rich, alluvial bottoms, the deeper the land is plowed the better. Care, however, must be taken in preparing thin soils not to throw too much clay to the surface, for this will impair the fertility of the seed bed and prevent the young plants from attaining a vigorous vitality. When the soil has been well broken, and repeatedly harrowed until it is thoroughly pulverized, it is in a condition to receive the seed. The best time for sowing this grass in Tennessee is the last week in September or the first week in October, after the dry hot weather has been tempered by cool nights, heavy dews and frequent rains. It is best not to sow the seed until the ground is moistened by rain, otherwise the heavy dews may cause the seed to germinate when the hot suns of mid-day are likely to destroy the young plants.

"The best crop to precede timothy is tobacco, or some clean-hoed crop. The next best is a crop of millet or Hungarian grass sown in the summer and harvested in September. This leaves the land clean and free from any noxious vegetation. Many persons, after the removal of the millet, do not re-break the land but harrow it well and immediately sow the timothy seed. With such preparation they claim they are able to secure a better stand than in any other manner. This result is no doubt largely dependent upon the character of the soil.

"The yield of timothy hay on fertile valley lands sometimes reaches three or four tons an acre. It often attains a height of five feet, with heads from eight inches to a foot in length. A bottom field lying on Red River in Montgomery county was sown by the writer in 1858 with a mixture of timothy and herd's grass. It was sown the latter part of September. The following summer thirty tons of excellent hay were sold from ten acres, and two or more tons were retained for home consumption. The soil of this meadow was a calcareous loam with a deep red, well-drained, unctious, clayey subsoil. The meadow lasted for twelve years and yielded heavy crops of hay every year, until it was finally plowed up to give place to a tobacco crop.

"Timothy is thought to be a great exhauster of the soil. This is doubtless true, but its capacity in this respect is not greater than that of Indian corn, wheat or tobacco. It has been well said that a crop that does not exhaust the soil is not worth gathering; that it is impossible to get from the soil something for nothing. The duty of every farmer is to restore to the soil, by commercial fertilizers or by home-made manures, some of the valuable nutritive elements that are taken from it by the crops."

The same authority gives the following as to grasses in this country, and the number of species that are indigenous to Tennessee soil. This indicates very clearly that while timothy grass is grown successfully, it is only one of a great variety of grasses that thrive in Tennessee:

"Between the Mississippi River and Atlantic Ocean there are known to exist about 295 species of grasses indigenous to the soil. Between the Mississippi River and the Rocky Mountains there are 190 species, 60 species belonging to that region exclusively. This makes a total of 355 species of grasses from the Rocky Mountains to the Atlantic Ocean. There are 250 that have been found between the Pacific Ocean and the Rocky Mountains, many of which are common to the other sections of country. It may, with confidence, be said that there are not less than 350 grasses indigenous to the United States. *Nearly one-half of these are found within the state of Tennessee.* Many have been introduced and are cultivated in every part of the state, and some of the indigenous grasses also have been domesticated. A considerable percentage of them are valuable for making pastures and meadows, but others are unmitigated pests and worthless for any purpose whatever."

QUESTION No. 3.—*Is the cow pea hay grown throughout the South considered equal to timothy?*

Questions similar to the above have come to this office from a number of stock growers in Illinois and Iowa, who evidently are not willing to believe anything in the shape of hay is quite equal to timothy. Several years ago the writer attended a farmers' convention at Jackson, Mississippi, where Prof. S. M. Tracy, then Director of the Mississippi Agricultural Experiment Station, read a paper on native grasses. When he had finished his paper, a prominent Iowa dairyman in the audience said: "Prof. Tracy, can you really raise timothy in Mississippi?"

"Yes, sir," was his reply.

"Well, why don't you?" said the Iowa man.

"Because, sir, we have something better," replied Prof. Tracy.

The following table prepared by Prof. Tracy, and published in connection with Bulletin No. 40, which treated of the subject, "The Cow Pea," will be read with interest by all stock growers:

"The quality of peavine hay compares favorably with that from red clover or any other leguminous plant, and is even richer in protein than are many of the common grain feeds. Jenkins and Wilton (Experiment Station Bulletin No. 11) give the averages of a large number of analyses as follows:

	Protein.	Carbohydrates.	Fat.
Cow pea	16.6	47.7	2.4
Red clover	12.3	38.1	3.3
Timothy	5.9	45.0	2.5
Corn	10.3	70.4	5.0
Oats	11.8	59.7	5.0
Wheat bran	15.4	53.9	4.0

"The approximate feeding values of these materials per ton, as calculated by the Connecticut Experiment Station, are as follows:

Cow pea	\$12.60
Red clover	11.20
Timothy	10.48
Corn	17.72
Oats	16.72
Wheat bran	13.76

"These figures make the values of the different crops, per acre, as follows:

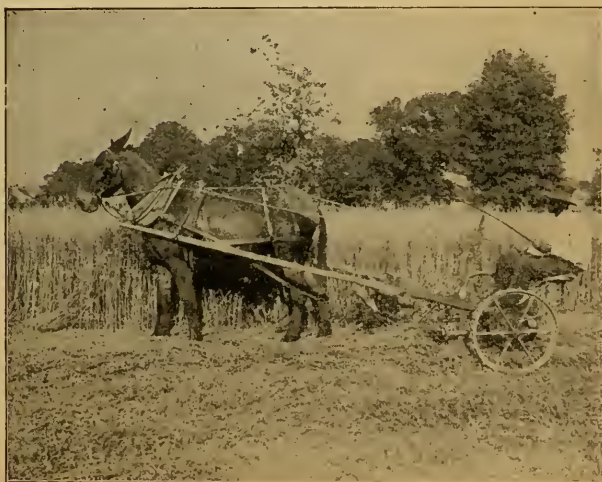
Cow pea, two tons.....	\$25.20
Red clover, two tons	22.40
Timothy, two tons.....	20.96
Corn, fifty bushels	24.80
Oats, forty bushels	10.71

"Of course, the cash valuations given above are only approximations, as they are based on the average market prices for the different feeds during a series of years, while the actual farm values will vary with the yields in different seasons, and with the local market.

"The cow pea is one of the few crops which will yield an abundant crop of valuable hay and at the same time leave the soil on which it grew in an improved chemical and mechanical condition for a succeeding crop. It is the best 'catch crop' which can be grown for hay, and is, by far, the best crop which can be grown on land from which wheat, oats or other crops have been harvested. In cultivating for hay, it is important to select varieties which will be in a condition for cutting early in October, as that gives the whole of the growing season for the production of a heavy crop, and brings the harvesting in the month when there is the least rain. If the crop is to have a long season for its growth, we prefer late ripening sorts, like the Black, Speckled Crowder, or Unknown; while if the planting is done late in the season, we have secured better results by the use of early varieties, like the Red Crowder or the Whippoorwill. The value of the hay increases very rapidly as the crop approaches maturity; while if allowed to become over ripe, many of the leaves drop and are lost, more or less of the seed will be shattered out and lost, and the hay secured is more hard and woody than when cut at the proper season. The best stage for cutting peavines for hay is when the first pods begin to ripen. When cut at that stage the vines cure much more easily and rapidly than when cut earlier, the total yield is at its heaviest, and, though the hay may not be quite so tender as when cut earlier, it will be eaten well and will have added much to its nutritive value."

QUESTION No 4.—
What about the grasses and forage plants of Louisiana?

Prof. W. R. Dodson, of the Louisiana Experiment Station, has an article on this question that may be considered



Rust Proof Oats, Sown in October, Photographed in April.

as authentic, and should be read with interest by every farmer, North or South, who aims to keep posted on agricultural conditions as they relate to states throughout the Mississippi Valley. Prof. Dodson says:

"Profit is generally measured in dollars. Now, is there any money saved or made by the farmer in growing his own forage, instead of buying it, when he lives in a cotton section? In order to answer this question from a comparison of data from an extended territory, I have tabulated the statistics of the United States government reports for the year 1900, covering the hay production of the various states. The statistics are based upon hay production, not only because they were the most available, but because they also furnish the fairest basis of comparison. They were collected by the Department of Agriculture at Washington, and are the most reliable to be had. Though they may not be satisfactorily accurate, they are relatively correct, when we compare one state with another. From these reports and the bulletins of the various agricultural experiment stations, I think it will be evident that the South, and Louisiana in particular, is neglecting opportunities in the way of forage production, not only in the way of supplying the home market, but also for stock raising. I do not believe any leading cotton state, save possibly one, produces all the hay necessary to supply its market, and yet there is not a single Southern state but what has given for the past few years a greater average tonnage per acre in forage crops than is the average of the states from which we buy.

"According to the reports of 1900, Iowa produced more hay than any other state in the Union, followed closely by Kansas, then New York, Missouri and Nebraska. Since these states lead in total production, and each is pre-eminently a stock and forage state, it will not be unfair to make some comparisons between them and the South. In these tables the irrigated regions of the far West have been disregarded, and, therefore, they apply only to where natural conditions prevail.

SOME HAY STATISTICS FOR THE YEAR 1900.

Name of State	No. of Tons Produced.	Yield Per Acre—Tons.	Average Farm Price.	Val. Per Acre.	Average Val. Per Cow.	Average Val. Per Head of Cattle.
Iowa	5,006,470	1.42	\$ 6.80	\$ 9.66	\$34.10	\$33.47
Louisiana	50,802	2.00	9.40	18.80	21.95	13.37
Kansas	4,031,461	1.32	4.55	6.01	32.50	28.90
Alabama	94,061	1.85	10.55	19.52	18.40	10.96
New York	3,351,991	.81	14.05	11.38	35.20	27.45
Texas	548,879	1.80	6.80	12.24	25.25	17.86
Missouri	2,768,015	1.29	6.95	8.97	28.60	26.55
Mississippi	99,922	1.75	9.95	17.41	20.75	13.59
Nebraska	2,639,489	1.38	5.15	7.11	35.50	30.38
Georgia	190,237	1.69	12.75	21.55	22.95	11.07

Average tonnage of five Northern and Western states leading in total hay production	1.24 tons
Average of five cotton states given above	1.81 tons
Average advantage of Southern states57 tons

"It will be seen that Georgia, holding fifth rank among the cotton states in hay production, produced 19 per cent more than does Iowa, which state not only leads in total production, but yields more per acre than any other Northern or Western state not under irrigation. The lowest yield of the five cotton states is more than twice the yield of New York. Yet New York takes third rank in total production of all the states.

"The average tonnage of the five Northern states above given is 1.24 tons per acre. That of the five cotton states is 1.81 tons per acre, a difference of .57 tons per

acre in favor of the South. This would be equal to 1,140 pounds, or 49 per cent more than the average of the hay section, so-called, of the United States. In making a list of ten states giving the largest yield per acre of hay, only one Northern state is included in the list. They are as follows:

Louisiana	2.00 tons per acre
Alabama	1.85 tons per acre
Texas	1.80 tons per acre
Mississippi	1.75 tons per acre
Georgia	1.69 tons per acre
Arkansas	1.63 tons per acre
Iowa	1.42 tons per acre
North Carolina	1.41 tons per acre
Tennessee	1.40 tons per acre
Kentucky	1.40 tons per acre

"In the North they make a specialty of raising hay, while we do not. Most of the hay in the South is made as a secondary crop. Our cow pea hay is gathered from the corn fields, our crab grass where we cannot suppress it, our Bermuda and Lespedeza from lands that have been pastured till almost midsummer. Our superior yields are due solely to the gracious favors of nature and not to the skilful hand of the cultivator. In the South, when a man says he has made two tons of cow pea hay to the acre, he means general ylt that he got this in addition to his crop of corn, and that he left a goodly portion as fertilizer to the soil. In the North, when a man says he has made a ton and a half of hay to the acre, it generally means that that is everything the land produced that year, and it was raked clean to make that. In the North and West, the average acre value of hay on the farm is \$8.62; in the South, \$17.90. When we consider the plants producing the bulk of the crops, we find that no leading hay plant of the South is so poor in nutritive elements as the popular timothy, from the North.



Indian Corn in Louisiana. Photographed in July.

"Timothy hay is selling in the markets of Baton Rouge for \$20 a ton, while the finest Lespedeza, baled, goes from \$14 to \$15 a ton, and people buy timothy. Surely one must possess himself of patience to keep from exclaiming, 'Thou fool!' Still greater must we be forbearing when we see this timothy fed with shelled corn to a working animal. Ten pounds of corn and ten pounds of Lespedeza hay come nearer giving a balanced daily ration for a working horse weighing a thousand pounds than will ten pounds of corn and fifteen pounds of timothy hay. In other words, when feeding corn, a ton of Lespedeza is worth as much as a ton and a half of timothy, and yet intelligent people will buy timothy. Allow me to give you some results from the

Louisiana Experiment Station. In October, 1900, we fertilized heavily with stable manure an acre and a tenth of bluff soil and sowed it in alfalfa. April 19, 1901, we cut and put in the barn 4,750 pounds of hay; May 25, 2,420 pounds; June 29, 2,220 pounds; August 2, 2,020 pounds. At this season the grass worms destroyed the alfalfa, and we lost one cutting, or most of it; but on September 23 we harvested 3,310 pounds of fine crab grass hay, and in October turned under a good covering of grass. A part of the alfalfa was sold for \$15 a ton. All of it could have been sold at the same price. Supposing the hay to have lost ten per cent additional after it was put in the barn, we would still have 10,260 pounds of alfalfa and 3,000 pounds of crab grass hay. Putting the crab grass at \$5 a ton, we have a money value for one and one-tenth acres of \$82.50. I believe it is safe to say that the expense of cutting, curing and baling the hay was not greater than would be the expense of cultivating and marketing a bale of cotton. These results were obtained on soil not naturally adapted for alfalfa, but it was made fairly rich by stable manure. A team of horses will produce enough manure in a season, if properly cared for, to fertilize an acre for alfalfa, and if every farmer with a team would put in an acre of this forage plant and raise no other hay, the total output of hay of the South would be materially increased. It would stop this infernal custom of buying timothy and other poor grass hays produced in the North and West.

"In 1898 Louisiana had within her borders 244,700 horses and mules. If an acre of alfalfa were planted for each team, and each acre would produce only four tons of hay, the product would be nearly 500,000 tons, or just ten times what is now produced. I believe every farmer in the South can have an acre of alfalfa if he wants it bad enough to go to the trouble to make that acre rich before he plants alfalfa on it.

"But let us consider some other plants. At Baton Rouge, in October, 1900, we planted six acres in red clover. In the latter part of June we harvested 26,000 pounds of clover hay and sold some of it for \$15 a ton. All of it could have been sold at the same price. On the six acres six head of stock were pastured the rest of the summer, and in the latter part of August we cut over four tons of crab grass hay with a little clover in it, thereafter furnishing nne pasturage till plowed for re-seeding. Farmers about Baton Rouge are raising from two to three tons of Lespedeza to the acre. Lespedeza compares very favorably in chemical composition with any of the leguminous forage plants.

"But we have been considering the yield in tons. Let us consider for a moment the harvest of nutritive elements per acre. I shall take the clover, the favorite of the North, and the cow pea, the most extensively cultivated legume of Louisiana. While as a matter of fact the cow pea gives a much larger yield per acre in three and a half to four months than the clover does in a year, to be liberal to the clover, we will suppose that the yield of the two is the same in pounds as it is hauled from the field. What is the relative amount of digestible nutrients that have been put away in each ton? A ton of clover hay contains about 206 pounds of protein and 760 pounds of nitrogen free extract. A ton of pea vine hay contains 332 pounds of protein and 884 pounds of nitrogen free extract. To each acre producing two tons, the crop of cow peas gives 252 pounds of protein and 168 pounds of nitrogen free extract more than the clover. Lespedeza gives an analysis nearly the same as the cow pea except a little heavier in nitrogen free extract. The ether extract in all instances is ample, so it is not considered. Now, when you take into consideration the fact that a crop of oats can be raised before the cow peas are planted, it will be seen that the advantages are overwhelmingly in favor of Louisiana."

In addition to the grasses and legumes already mentioned in this circular, it is unfortunate we cannot, for want of data, describe in detail other varieties, such as hairy vetch, velvet beans, bermuda and lepedeza, all of which are grown successfully in the Southern states.

SOILS OF KENTUCKY, TENNESSEE, MISSISSIPPI AND LOUISIANA.

About the first information desired by an intelligent farmer contemplating a change of location is something authentic concerning the character of the soil in that particular part of the new country in which he expects to locate; he must know about the average annual rainfall, the timber and fuel supply, and the climatic conditions, but above all he must know what the soil can and does produce.

Fortunately, the American farmer of today has facilities and opportunities for becoming acquainted with the soil and the use to which it is especially adapted, that were unknown a quarter of a century ago. This circular does not treat the subject of soils scientifically, but aims to emphasize the importance of it, and to make mention of some facts relating to the soils of Kentucky, Tennessee, Mississippi and Louisiana.

Western farmers accustomed to black prairie soil that rarely ever fails to produce a crop are naturally prejudiced in favor of that color, and often will not be convinced, until a personal experiment has been made, that many of the clay soils of the four Southern states mentioned are equally as productive as the black soil of Illinois or Iowa. As a means of acquainting all who contemplate a change in location with the varieties of soil and the chemical analysis of the same in the states of Kentucky, Tennessee, Mississippi and Louisiana, we heartily recommend that an application be made to the Directors of the Agricultural Experiment Stations of the above states for a copy of a bulletin devoted exclusively to the subject of "Soil."

QUESTION NO. 1.—*What is the area and character of the soil in what is known as the "Blue Grass country"?*

The Blue Grass Region, roughly described as lying north of a semicircular line drawn from Vanceburg to Louisville and passing through Junction City, and containing 8,186 square miles, is the blue and gray limestone area, the soil of which has been formed by the decay of the underlying limestone and, to some extent, by inheritance from formations that were once above, but have been removed by erosion. This soil is remarkably deep and rich, the richest being that formed from the upper part of the oldest formation in the state and indeed in the Ohio Valley—the Trenton formation, a highly phosphatic limestone, furnishing by decay just those ingredients the blue grass needs in order to attain its greatest luxuriance and perfection of growth. This typical blue grass region contains about 1,062 square miles, and is included in the counties of Bourbon, Scott, Franklin, Woodford, Mercer, Boyle, Garrard, Jessamine and Fayette. The surface lying between 800 and 1,000 feet above the sea is gently rolling. It is pitted in some places by circular shaped depressions or sinks and small caves, and copiously gushing springs are frequent. The soil in Kentucky is the great heritage it has received from the past. The qualities of this in different regions are different enough to stimulate the cultivation of a variety of crops, and the development of a diversity of industries closely related to them.

Stock raising, particularly the breeding of fast horses, is the distinguishing industry of the blue grass counties. Tobacco is a staple product, especially in the limestone district in the Jackson Purchase region. Hemp is more extensively raised in the blue grass counties, and corn is grown wherever the blue grass is found.

QUESTION NO. 2.—*Where do we find in Kentucky the best soil for fruit culture?*

On the east, south and west of the blue grass region, as above described, is a strip of country diversified by conical-shaped sandstone hills, rising to a height of 1,200 to 1,300 feet above the sea (300 to 400 feet above the surrounding country). These are detached outliers of a limestone capped plateau lying further back. In the west, the edge of this plateau presents toward the blue grass a continuous bold front, or escarpment, known as "Muldraugh's Hill."

This formation seems to be especially adapted to fruit growing. Indeed the growing of apples and peaches on "Muldraugh's Hill," for shipment to Northern and

Eastern markets, has become quite an industry. For practical fruit growers who would make a specialty of this industry we do not know of a better place to recommend than the one above described, where lands suitable for this purpose are still in the market for \$10 per acre, and even less.

QUESTION No. 3.—*Can the apparently worn-out lands of Tennessee be made productive?*

The Agricultural Experiment Station of Tennessee is trying to solve this question, as will be seen by the following, which appeared in a recent publication concerning the soils of Tennessee:

"One who travels over the state, by rail or by country road, will see everywhere, in the richest as well as in the poorest sections, broad stretches of land so much worn as to be unproductive, and very many of such areas properly classed as abandoned land. 'Old fields,' turned out to be gradually but surely reduced to utter barrenness, are unpleasantly numerous, not only in the mountainous region of East Tennessee, and along or near the escarpments of the highland rim of Middle Tennessee, but in the more level land of the great central basin of the state, and in those counties of West Tennessee most famed for rich and productive soil. The proportion of such land so much worn and so badly wasted as to make it impossible to restore it for any useful purpose, is much less than is suggested by superficial observation. In almost every instance these 'old fields,' when cleared from the forest, were chosen by the farmers of that day as the best lands in their possession. Their judgment was doubtless well founded. There are tens of thousands of acres which are beyond redemption save by reforestation, but of the immense area now regarded as abandoned land, not one-twentieth is beyond hope of recovery by timely efforts.

"The problem is to maintain the productiveness of the best lands under cultivation, and such as are used for orchard, garden, meadow, pasture and woodland; to restore such areas as are now considered unprofitable, and to determine, if we can, the best, surest, and quickest ways to these ends. Plainly one of the things to be done is to find out all the facts as to the composition, physical and chemical, of soils such as were in the first instance chosen by old and skillful common-sense farmers. This can be done best by an investigation of the virgin soils.

"The soil is not a mere mass of inert, dead matter, but a theater of ceaseless activities,—a wonderful combination of mechanical, chemical and vital energies,—of agencies destructive and reconstructive—of an ever repeated cycle of death and resurrection.

"Soils in forest or prairie, unaltered by the influence of man, are, as to their mechanical as well as chemical constitution, in every way best adapted to the healthful growth of the vegetation found native thereon. If it may be possible in any way to maintain a virgin soil in as perfect condition as we find it, we may easily enjoy all the 'fruits of the earth' with almost as little labor as was demanded of Adam in his first home; but this is as improbable as is a return to the innocence and blessedness of Paradise. But we may realize, in some measure, a Paradise Regained. Who will labor with brain as well as body, with heart and head, doing what is prompted and directed by right thinking, may approach the beauties, and enjoy much of the happiness, of the garden which 'the Lord God planted eastward in Eden.'"

It is fair to say, in connection with this subject, that very little of the so-called worn-out lands of Tennessee are to be found on or adjacent to the Illinois Central Railroad. West Tennessee, or at least that portion of it within sight of the Illinois Central trains, shows a soil adapted to the successful cultivation of winter wheat, oats, corn, vegetables and fruits. Indeed, the annual products of the soil in that region attest its productiveness. The clay hills, as well as the alluvial valleys, under even fairly good cultivation, produce abundant crops.

QUESTION No. 4.—*What is the character of the prairie soil of East Mississippi?*

The prairie lands in East Mississippi, known during the Civil War as the "Corn

Field of the Confederacy," consist of comparatively large amounts of clay, lime and humus, which determine their texture. As a rule, they are rich in potash and phosphoric acid, though there are small areas that do not contain large amounts of these substances. These lands do not take kindly to commercial fertilizers, and farmers and planters in that section have abandoned their use entirely. Melilotus, cow peas and clover are used on any of the lands that have become non-productive through improper tillage, or through cultivation of cotton for a long term of years. Northern farmers who visit the South are quick to see the effect of non-rotation of crops. It is not unusual to see fields that for fifty consecutive years have been cropped in cotton, with soil that from appearances is anything but fertile; and while such conditions do not speak well for the farmer, they do demonstrate that the soil is far better than its color would indicate. The prairie region of East Mississippi will, in time, become known to Northern investors, and the character and fertility of the soil will make it a favored section for immigration.

QUESTION No. 5.—*What is the character of the Mississippi Delta soil?*

The soil of the Mississippi Delta varies, but that portion lying between the north line of the state of Mississippi and the city of Vicksburg, and between the Yazoo and Mississippi rivers, is an alluvial deposit that for ages has been accumulating from the annual overflow of the Mississippi river. These deposits came from the fertile lands of all the states bordering on the Ohio, Missouri and upper Mississippi rivers. The Delta country referred to, one hundred and sixty miles in length by about sixty in width, being lower than the river, became a natural basin for this deposit, and the result is a soil from five to ten feet deep, contributed by Minnesota, Wisconsin, Iowa, Illinois, Nebraska, Missouri, Ohio, and other states, and so fertile that a bale of cotton or fifty bushels of corn per acre, without the use of an ounce of fertilizer, is not an unusual yield. For sixty years these lands have been partially protected from overflow, but until within the past twenty years the levees were crude, indeed they were little more than artificial mud banks; but today, through government appropriations and government supervision, assisted by the State Levee Boards, a system of levees has been established which protects the Delta lands except during years of great floods, and the soil is so very fertile that even when there comes a year of overflow, as soon as the water recedes the farmer puts in his crop with good results. Nowhere in the United States is there another area of equal size so fertile and productive as the region above referred to, and many who read this circular will live to see these lands fully developed and commanding a ready sale at \$100.00 per acre.

QUESTION No. 6.—*Can the soils of the uplands, or hill country, of the South, be restored?*

Prof. Wm. C. Stubbs, director of the Louisiana Experiment Station, has furnished an article on this subject that covers so completely every phase of it, that we publish it in full:

"A careful investigation of the uplands of the Southern States will show that the constant culture of cotton and other hoed crops has almost depleted the store of humus originally present in these soils, and with it has disappeared the original supply of nitrogen. Without an abundance of nitrogen no soils will grow grasses successfully, and without a supply of humus in a soil all crops, especially the grasses, will be more or less effected by a drouth, even of short duration. Since the entire South is turning its attention to the growing of stock, raising of beef, mutton, pork, etc., for the markets, the old adage, 'More grass, more cattle; more cattle, more manure, and the more manure, more grass,' seems to be an appropriate shibboleth of every Southern farmer at this particular crisis in our agricultural history.

"It is impossible to make successful pasturages, or grow large grass crops, upon our poor uplands until their fertility has been restored. Nitrogen, the chief ingredient required by all grass crops, is the costly constituent of all commercial fertilizers, and is the valuable element in stable and home-made manures, including our cotton



Stuyvesant Docks, New Orleans, La.

seed and cotton seed meal, and, as before recited, is wanting generally in all of the uplands of this State. It is worth, according to the tariff of prices now adopted in this State, fifteen cents per pound in commercial fertilizers. At this price it is almost prohibitory to most of our farmers. But, fortunately, nature has provided for us a way by which we can store up this element in our soils in large quantities at a mere nominal cost. Leguminous crops have been used from time immemorial as renovators of soils and for furnishing valuable food material for civilized man and domestic animals. Even the wild deer of our forests finds the larger part of his support in the wild legumes of our woods and swamps, beggar lice, wild peas, etc.

"This family of plants is a very large one, and every civilized country has adopted one or more of them for feed and fertilizing purposes. They all have nodules on their roots, filled with microbes, which, while they draw much of their support

from the plants upon which they live, yet supply themselves, in a manner not yet clearly understood, with nitrogen drawn directly from the air. Having only an ephemeral existence, they are rapidly absorbed at death by the host plant, which utilizes not only the plant food which these microbes have taken from the plant during their short existence, but also the nitrogen which they have directly appropriated from the air. In this way a leguminous crop, through the microbes on the roots, will gather during the season of its growth an almost incredible amount of nitrogen. The microbes are simply purveyors for their hosts, of nitrogen, taking it from the great reservoir of nature, the air (which contains four-fifths of its volume of free nitrogen), and ultimately transferring it to the plant with which it lives in symbiotic union. The agriculturist of today, even the most advanced in theory and practice, fails to appreciate in its fullest measure this wonderful providence of nature and a clear discrimination of its use, as is demonstrated daily by the investigations of science, in the selection of plants best adapted to his environment.

"Only by the practice of planting leguminous crops can we hope to economically and profitably restore the nitrogenous matter to our soils, and only by the study of the composition, individuality and adaptability to our surroundings of the various leguminous crops, can we select one or more which will accomplish the above result in the shortest time. Fortunately, we have in the South several excellent crops of the leguminous family to select from.

"It should be remembered, however, in the cultivation of these crops, that only nitrogen is gathered from sources exterior to the soil. Whatever of phosphoric acid, potash or lime is needed by these plants must be obtained from the soil. If the latter be deficient in any of these ingredients, they must be supplied before large crops can be produced. It is true that the usually long tap roots of this family of plants, penetrating to deeper depths, will draw upon the subsoil for supplies unavailable to ordinary crops with fibrous surface roots, and these apparently, at first, show no want of mineral fertilizer; but the safest and best procedure, demonstrated by abundant experience, is to apply, liberally, mineral manures (especially acid phosphate in this State) to the leguminous crop before planting. By so doing you place within easy reach of the growing plant every element in abundance, save nitrogen, and this, under such favorable conditions, it will get in largest possible quantities from the air.

"Leguminous crops must be the foundation stones upon which the future prosperous agriculture of the uplands of the South must be built.

"Alfalfa, crimson and red clover, lespedeza, hairy vetch, Spanish peanuts, cow peas, velvet beans, etc., are all valuable crops, adaptable to different portions of the South.

"Other things being equal, that crop which will produce the largest amount of nitrogen, obtained from the air in a given time, is the best crop to grow for fertilizing purposes. Usually, too, that crop containing the largest amount of nitrogen is best for feeding purposes, and it is always advisable, wherever there is stock to be fed, to utilize the crop as stock feed, rather than to turn it under as green manure. But when fed, the manure from the animals should be carefully preserved, and scrupulously and intelligently returned to the soil. By intelligently growing the proper crops, and feeding them in proper combinations to live stock, it is possible to improve, gradually, a farm, and, at the same time, profitably raise a large number of stock. Only by such action can the worn lands of the South be restored and made adaptable to profitable stock raising."

MARKET FACILITIES.

No matter how fertile the soil of a country may be, nor how enormous the crops it will produce, if such products cannot be quickly and cheaply marketed they have little commercial value, and the value of the land is indeterminate except from a

speculative standpoint. Every farmer should consider carefully the market facilities of a section of country new to him before locating or investing there, and it is to such men that this circular is addressed, with a view to giving a brief description of the shipping facilities afforded by the Illinois Central and Yazoo & Mississippi Valley Railroads to shippers located, or who may locate, at points along those lines in the South.

NEW ORLEANS AND MEMPHIS.

Memphis, Tennessee, with a population of 125,000, is the greatest interior cotton market, and one of the great lumber markets in the United States. It is also one of the most enterprising cities in the country, and is very rapidly growing, both industrially and in population. Memphis is a great railroad center. It has the Choctaw, Oklahoma & Gulf, the Frisco System, the Louisville & Nashville, the Nashville, Chattanooga & St. Louis, the St. Louis, Iron Mountain & Southern, the St. Louis Southwestern, and the Southern Railroads. It is the northern terminus of the Yazoo & Mississippi Valley Railroad, and is on the main line of the Illinois Central, between Chicago and New Orleans, furnishing a fine local market for all farm products grown at points on either of these lines in the states of Kentucky, West Tennessee or Mississippi.

New Orleans, Louisiana, with a population of 325,000, is the second port in the United States, and the greatest cotton market in the world. No less than 2,316,906 bales of cotton—nearly 25 per cent of the entire crop of the United States—were handled at that point last year. It is the southern terminus of both the Illinois Central and Yazoo & Mississippi Valley Railroads, and to handle the vast amount of grain exported through that port, the Central Mississippi Valley Route has, at Stuyvesant Dock, one elevator with a capacity of 1,500,000 bushels; and another with a capacity of 1,000,000 bushels, grain being unloaded from the cars at the same time that vessels are taking on their cargoes. The wharves at New Orleans, which are used in connection with the export trade of these two lines of road, cover three and one-half miles of river front; and at "Harahan Yards," about three miles beyond the city limits, they have more than another mile of river front.

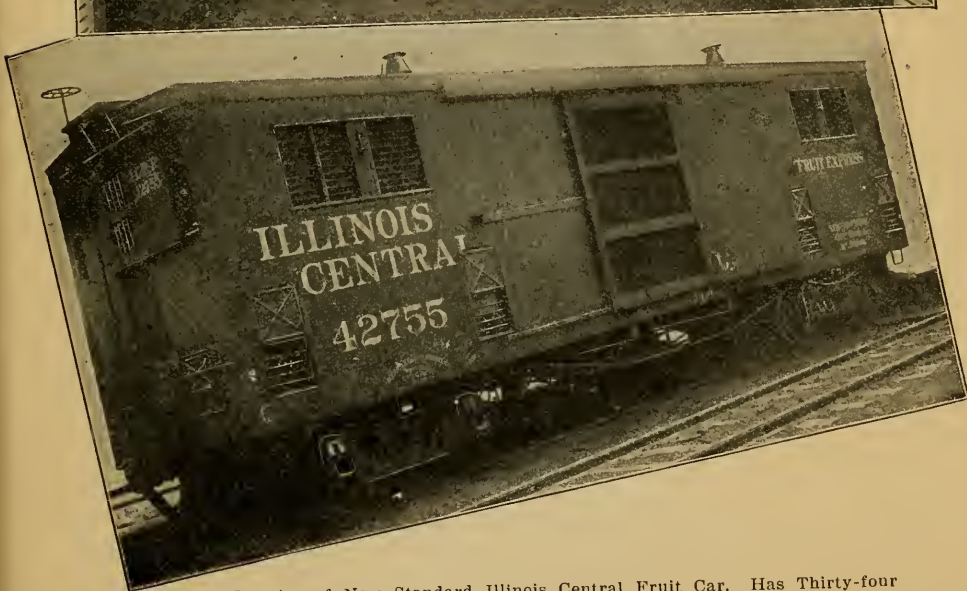
In addition to these home markets—Memphis and New Orleans—shippers at points on the lines of the Illinois Central and Yazoo & Mississippi Valley Railroads have the advantages of direct lines of roads to St. Louis, gateway to Kansas City and a vast portion of the west; Louisville gateway to the east; and to Chicago, St. Paul, Omaha, Sioux City, Sioux Falls, and the north and northwest. Also a double track, or two tracks (which is practically the same thing so far as the expeditious handling of through freight is concerned), the entire distance from New Orleans to Chicago.

The depletion of northern forests has caused a great increase in the demand for southern lumber, and this, together with the first-class shipping facilities already at hand, is certain to be the cause of a rapid increase in the value of timber lands along the Southern lines of the Central Mississippi Valley Route, within the next few years.

FACILITIES FOR MARKETING PERISHABLE PRODUCTS.

The proper handling of fruits and garden truck for the northern markets has for years received special attention from the management of the Illinois Central Railroad, and the service provided for such shipments is as nearly perfect as it can be made. The following description of the methods used will be found interesting:

The earliest shipments are from Louisiana and usually begin in February. These are handled by the Express Company. The express charges are, of course, much higher than freight charges, but the early shipments bring such high prices that the shipper can well afford to pay them. In addition to regular baggage cars which do



Exterior and Interior of New Standard Illinois Central Fruit Car. Has Thirty-four Ventilator Openings, Exclusive of Screen Doors, all of Which Can Be Operated Open or Closed by Means of Steel Slides.

not require ice, the Express Company also provides refrigerator cars equipped for passenger train service, which are handled on passenger trains.

These cars have ice boxes with a capacity of from eight to ten tons, which are filled with ice, not at the expense of the shipper as is the case in some parts of the country, but by the railroad company at regular icing stations and the cars then sent to the loading station. After being loaded, they are re-iced at the first icing station.

and as much ice added en route as may be necessary to properly protect the shipments, and all at the expense of the company. Icing stations are located at McComb, Crystal Springs, Canton, Jackson, and Water Valley, Mississippi; Jackson, Tenn., and Mounds, Illinois. For the first few weeks, the shipments run from two or three to seven cars per week. Schedules are arranged so that shipments from all stations are picked up each day and adjusted to get the shipments to destination at the best market hours, and in the quickest possible time consistent with safety. As many as seven extra express cars can be handled on a passenger train in addition to the regular equipment. When shipments amount to more than seven cars, special trains are run.

As soon as the volume of business warrants, fruit trains are put on,—this freight service being inaugurated about April 10 of each year. These trains, for the handling of local shipments of fruit and vegetables, in addition to equipment for car load shipments, also provide separate cars for less than car load lots. Fruit sheds are provided at various stations, and platforms for the handling of cabbage, etc., and the trains stop at platforms for large and small shipments alike. These shipments from local stations are consolidated at district terminal points, and solid fruit trains run through to destination on "manifest" (fast freight) schedules. The principal fruits and vegetables handled by these trains are as follows:

Strawberries,	Beets,	Tomatoes,	Parsley,
Peaches,	Potatoes,	Corn,	Lettuce,
Plums,	Cucumbers,	Asparagus,	Onions.
Cantaloupe,	Carrots,	Radishes,	
Pears,	Peas,	Beans,	

The Illinois Central Railroad Company owns and operates 1,890 refrigerator cars and 1,806 fruit cars, which is ample equipment for handling the great fruit and vegetable traffic of this Company, that has nearly all developed within the past twenty years. Certain varieties of fruits and vegetables are handled every day in the year, but as a rule the great bulk of fruit and vegetable shipments from southern states is moved within a period of three months.

HANDLING SHIPMENTS IN CHICAGO.

All fruit trains are scheduled to arrive in Chicago at an early hour in the morning. The Illinois Central fruit warehouse in Chicago is located at the foot of South Water street, about half a mile from the intersection of Dearborn and South Water streets, which is the center of the fruit and vegetable commission district. Many of the trains arrive at the platform and the fruit and vegetables are delivered to the receivers long before the people of Chicago are astir. South Water street at that time is perfectly clear, and teams make delivery at the store doors within ten minutes after leaving the freight yard. The fruit platform will accommodate thirty-eight cars at a time, and deliveries can be made at the same time to every receiver on the street. During the height of the fruit and vegetable season, just as soon as one train is unloaded it is pulled out of the way and another placed for unloading.

The terminal facilities of the Illinois Central at Chicago are unsurpassed, and are fully adequate for the prompt and satisfactory handling of its immense fruit and vegetable traffic.

CONCLUSION.

From the foregoing it will be seen that it is not on account of inadequate shipping facilities that the lands along the lines of the Illinois Central and Yazoo & Mississippi Valley Railroads in the states of Kentucky, Tennessee, Mississippi and Louisiana, are as cheap as they are today. It is simply further evidence to prove

that these fertile lands have not yet reached their proper values, and that they offer better opportunities, both for homeseekers and legitimate (not speculative) land investments, than any other part of the country.

The cuts appearing in this circular simply illustrate the enormous expenditures of the Illinois Central Railroad Company in furnishing proper equipment for the handling of farm products, both en route and at destination, and these shipping facilities should be carefully considered by the homeseeker or land investor; for upon this depends, very largely, his measure of success.

SOUTHERN IMMIGRATION.

The question of immigration is an important one. The United States, with its now 80,000,000 of people, owes more to immigration than we are willing to admit, and if we may believe reports as published in the daily press, the year 1903 will excel all others in the number of foreign immigrants who will come to our shores with a view of becoming permanent citizens of the United States. For years writers upon the subject of immigration have insisted that the natural course of immigration was along latitudinal lines—a theory that, in a general way, is correct, but it is not absolute. Southern California is settled up by people from Iowa, Minnesota and other Northern states. The same may be said of Texas; Florida is largely inhabited by those from Northern latitudes; and just now Western and Northern people are pouring into Tennessee, Mississippi and Louisiana, where any number of their neighbors have been pleasantly and prosperously located for years, and have demonstrated by actual experience that neither the climate, health, habits of the people, water supply, or any other characteristics of the South, or of Southern people, are such as to hinder any Northern family from immigrating to that section of the country. It is true that the conditions in the South are in some respects unlike those of the North; it is also true that different conditions are found by those immigrating from the East to the middle West, or from the middle West to the extreme West. These things are understood and expected by immigrants; and the statement is made without fear of contradiction that families from the North need have no hesitancy in settling in the South. Of course, people from the North are more congenial to those from the North. This is natural. Therefore, if a suitable place can be found where a Northern settlement has already been started, where schools taught by Northern teachers are already established, and where civic and church organizations have already been founded, it will, perhaps, be pleasanter for the Northern immigrant to locate there than in a neighborhood where there are no Northern people. This, however, must not be considered absolutely necessary, for it is not. The Southern people are genial and hospitable, and are ready to welcome Northern people with honest intentions who may locate among them.

Southern immigration is no longer an experiment. Not a day passes that Northern families are not crossing the Illinois Central bridge at Cairo, destined to points in the states of Kentucky, Tennessee, Mississippi and Louisiana, and pleasant letters are received from them, expressing their satisfaction, and often their delight, at being so happily located.

QUESTION NO. 1.—*What is considered the best time of year for Northern people to move South?*

Whenever they are ready. The same general rules should be observed in moving South as to the West or Southwest, except it should be kept in mind that spring work in the South begins in January or February, instead of March or April, as in the Western states. As a rule, families do not think of moving West in the summer time, and they should not go South at that time; not simply because of the warm weather, but for the reason that the conditions at that season of the year are unfavorable for beginning work on a new farm. The very best month in the year to locate in the South is, in our judgment, November, for the following reasons:



Illinois Central Fruit House, Chicago, Showing Front and West Side. Scene at 6:00 a. m., at Fruit Platform, on East Side of the Fruit House.

The weather at that time is perfect; the crops, with the exception of cotton and sugar cane, have all been gathered; and it is an excellent time for building, repairing, building fences, and a general clearing up before the winter rains, preparatory to the winter or early spring crops.

QUESTION No. 2.—*Where should Northern people locate in the South?*

In the states of Kentucky, Tennessee, Mississippi or Louisiana. This reply may provoke a smile—but wait! These four Southern states are traversed by the Illinois Central Railroad, which runs direct to New Orleans, Memphis, Cincinnati, St. Louis, Chicago, St. Paul, Sioux City, Sioux Falls, and Omaha, furnishing the very best possible market facilities for all farm products. It is a well known fact that that company gives more attention to the careful handling of perishable products than any transportation company in the world. It is also well known that these states have a variety of soil that grows successfully, a great diversity of field crops, vegetables and fruits, so that a farmer may suit his location to the kind of crops he desires to cultivate.

Another point of advantage is the facilities for going back and forth between the North and the South. During the winter months the friends from the North visit those in the South, and vice versa. If located on the line of the Illinois Central the trip is an easy one. For instance, by leaving Chicago after supper tonight, you take breakfast in Tennessee tomorrow morning, you dine in Mississippi, and have an early supper in Louisiana; and this trip can be made in free reclining chair cars, or Pullman sleepers, without change. Similar service is also available northbound.

Another excellent reason for locating on the Illinois Central Railroad is the fact that the country is being settled up by an unusually well-to-do and intelligent class of people. The writer has been going in and out among them for twenty-three years, under all circumstances and at all times of the year, and has found them worthy of respect and admiration. In the territory mentioned will be found churches of every denomination, and schools that are progressive and up-to-date. So great has been the change in many respects within the past twenty years that the line drawn by the Ohio river between North and South has become quite indistinct and from some points of view almost entirely obliterated.

QUESTION No. 3.—*Should immigrants from the North take their stock and farm machinery with them?*

Horses, hogs, calves and chickens may be taken South, but in the shipment of horned cattle there is a percentage of risk, unless the shipper cares to be at the expense of having them vaccinated. Two years ago Prof. Wm. C. Stubbs, Director of the Louisiana Agricultural Experiment Station, purchased a fine herd of cattle at Clinton, Illinois. The writer propounded this question, "How many of these do you expect to lose?" "Not one of them," was his reply. "We shall vaccinate them as soon as they reach the station, and will lose none of them." Unless the party contemplating a Southern move has a fine herd that he does not care to part with, and is willing to try the vaccination process, we would recommend that his horned cattle be sold, and others purchased in the South that are already acclaimed.

In the matter of farm machinery, there are many things in use in the North, such as reapers, mowers, hay rakes, harrows, etc., that can be used in the South; but in the matter of plows and cultivators, it would be well to address a letter to some Northern farmer who has been located in the South for several years, and get the benefit of his experience as to the kinds of plows best adapted to Southern soil and the cultivation of Southern crops.

QUESTION No. 4.—*Which of the four states mentioned claims the most Northern people?*

This is a disputed question. Tennessee has a large number of people who formerly lived north of the Ohio river. Some of her large cities, such as Chattanooga, Memphis and Nashville, have of late years had large accessions of Northern people. But the same may be said of Louisiana. My judgment is that within the past ten years more Northern farmers have located in Louisiana than in any other of the four states, and this is due to the fact that lands in Northern Louisiana are very cheap, and especially adapted to vegetable gardening for early

shipments to Northern markets, and the large acreage now cultivated in rice by Northern farmers. The states of Kentucky and Mississippi, however, are fast coming to the front in the matter of Northern settlers. Kentucky is a wonderful state for diversified farming, and Mississippi, as an all-around agricultural state, has no superior. The low priced alluvial lands of Mississippi will soon be eagerly sought after by Northern men who are quick to see and to invest where there are promises of good returns.

We desire to emphasize a few points in connection with this question of Southern Immigration. Never locate anywhere until you have personally examined all the conditions that enter into the making of a pleasant home. Take no man's word for the quality of the soil in a farm you are about to purchase. See it yourself and test it by every rule so well known to farmers. Be careful and locate where the water is good, and plenty of it. Look well to your titles. Do not let anyone convince you that stock does not need food and shelter in the South during the winter months—it is not true. Locate as near as possible to some station on the line of



Farm Home of H. C. Ward, Greenfield, Tennessee, Who Moved from Near St. Joseph, Michigan, in 1886.

the Illinois Central or Yazoo & Mississippi Valley Railroads. Do not expect to make a fortune the first year. Pursue the same methods of farm attractiveness as you did in the North. Don't hesitate to question Southern planters—they may be able to give you some valuable pointers. Resolve to succeed, and give the same amount of energy to the Southern as you did to the Western farm. Consider that human nature is much the same everywhere, and that the opportunities for making a delightful and successful home are no better anywhere than in the States of Kentucky, Tennessee, Mississippi or Louisiana.

LETTERS FROM NORTHERN FARMERS.

For several years the states of Kentucky, Tennessee, Mississippi and Louisiana have been persistently advertised, and as a natural result many Northern home-seekers have, after examining all the conditions, located at various points in these states on the lines of the Illinois Central and Yazoo & Mississippi Valley Railroads. Their experience as to the opportunities for establishing permanent and happy homes in the South ought to be valuable testimony. We have, therefore, collected a number of letters from responsible men, who tell their own stories in their own way, and over their own signatures. We commend these letters to the careful reading not only of those seeking new homes but also of any who have money to invest in farm lands. More men within twenty-five years have made money, and made it easier, in the advance in farm lands than in any other way. Lands in the South are still in the market at low prices. Lands that when properly cultivated will produce from \$50 to \$100 per acre annually are sold for \$5 to \$25 per acre. Such conditions cannot last. Thousands of tenant farmers throughout the Northwest, who make little in excess of their annual living and expenses, can, by locating in the South, do what has been and is being done by the men who wrote the letters as they appear in this circular. The South is no place for a lazy man, but a man who wants a pleasant and comfortable farm home, who loves his home and his farm, who enjoys working better than loafing in town, who keeps pace with new methods in farming, in new machinery, best breeds of cattle, best varieties of forage plants, fertilizers best adapted to his soil, best markets, etc., will succeed. To such men we extend a most cordial invitation to visit the states of Kentucky, Tennessee, Mississippi and Louisiana. Seeing is believing, and in nothing should one exercise greater care than in the selection of a new home. After reading this circular, please hand it to your neighbor.

DUNCAN, MISSISSIPPI, September 28, 1903.

CAPT. J. F. MERRY, A. G. P. A., I. C. R. R., Dubuque, Iowa.

Dear Sir: I came to Duncan, Mississippi, in October, 1897, from Tuscola, Illinois. Tuscola is in that black belt of Illinois, where land is now worth from \$130 to \$150 per acre, and rents for \$6 per acre. I drove through from Illinois and brought four horses and a wagon. I had about \$250 in money after making my first payment on 160 acres of land, bought of the Yazoo & Mississippi Valley Railroad company. I cleared up and put into cultivation, in 1898, seventy-five acres, which I put into cotton and corn. Both were very good crops. Since that time I have farmed and have never failed to raise a good crop of cotton and corn and vegetables. In this respect this country reminds me of the black belt of Illinois, where failures in crops are not known.

I farm some by day labor, some by share croppers, and some by renters. I have gotten as high as \$8 per acre rent, but \$7 is the regular rent. My share crops bring me from \$10 to \$25 per acre, owing to the way the tenants work it, the season, etc.

I am now working 140 acres in corn, 160 in cotton, and 140 in stock peas. The balance of the 500 acres on which I live is in the woods, orchard, lawns and lots. I have another 160 acres, on which I first located, which rents for \$7 per acre; taxes on same are \$16.50 per annum. Corn raisers from Illinois who have seen my corn during the past week estimate it at from 50 to 60 bushels per acre. Cotton raisers estimate my cotton at from one-half bale per acre in poorest crops to one and one-half bales per acre in the best, averaging about a bale. I raised 50 acres of oats this year, which were a little short, but well headed. My wife put up blackberries, peaches, pears, etc., to the amount of 150 quarts. I have never seen better fruit than grows here. Also, any kind of vegetables grow to perfection, such as egg plant, cabbages, onions, potatoes, pumpkins, squashes, etc., and all kinds of small vegetables.

I married at Danville, Illinois, in 1898, and brought my wife here, where we have lived ever since. We have one child, a boy; four years old in October. The health of my family has been splendid—I think better than in Illinois.

I would say to men who have money to invest, that this land is the safest place to invest that I know of, as it not only brings a big interest on the money invested, but it steadily increases in value—but never booms and goes back. I bought raw lands in 1897 at \$7 per acre. Today I would not offer them at \$50 per acre, for in ten years they will be selling for \$100 per acre, judging from the past six years, and also from the fact that land that will rent like this, and bring the income that this land will, and being the best naturally drained land, cannot stay at \$50 per acre, for there is too much money in Illinois and other Northern states that is not bringing such interest on the same security. I built a gin plant last year that cost \$12,000. It made a net profit of \$3,200 last year. I have 660 acres of land, besides personal property. This property is not for sale, but I would not take \$50,000 and turn it all over. I believe the Delta is only in its infancy. Very respectfully,

W. R. BAUGHMAN.

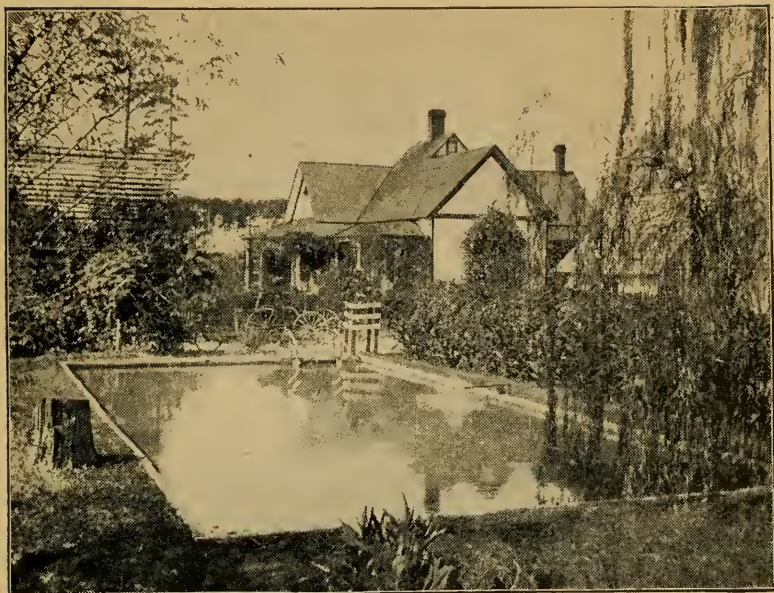
ROSELAND, LOUISIANA, September 30, 1903.

CAPT. J. F. MERRY, Dubuque, Iowa.

Dear Sir: Pursuant to your request for a letter from me, would say, I came to this place thirteen years ago from Kalamazoo, Michigan. I had been confined closely in an office for years and was in miserable health when I arrived. Nearly three weeks were spent in bed, after arrival. I soon began to gain, not by taking medicines, however. The splendid soft well water and piney woods air quickly restored me to good health. I now weigh 168 pounds. Since coming here we have not spent to exceed \$10 on doctor's bills for a family of five. Previous to coming I had spent several seasons in Southern California, but regard this as a much superior and more healthful climate than that.

I have been also blessed in a financial way. After I had been here a few years I began the growing of truck for the Northern markets and have succeeded very well indeed, having made some money each year, the past year having been the best of them all. I only cultivate about fifteen acres in vegetables, but from those acres I make more clear money than is made from many of the best 160 acre farms in Michigan. One can clear \$100 per acre or more per annum on early vegetables, and then raise a second crop of hay, corn, cotton, etc., the second crop often paying for raising the first. With a small cash capital, energy, a *good education* and push, there is no valid reason why a small farm in this section should not pay for itself every year, especially when land can be bought for from \$5 to \$25 per acre, owing to location and improvements. As an instance of what can be done and was done this year, would say that I know of a party who, from two and three-fourths acres of cabbage, this year sold gross \$1,780 worth; after paying freight, commission and drayage, he had \$1,190 left. On this same cabbage land he planted, June 3, corn, which is now ripe and ready to gather. This corn will yield fifty bushels per acre, which, at sixty cents per bushel, gives \$30 per acre more. This single instance will give an idea of what can be done. I believe in diversifying crops, so if one fails all will not be lost, for some crops of vegetables fail, but not always the same one each year. We have mostly Northern people here, have a good public school eight months in the year, good churches, and Christian people.

Now do not think everybody that comes here succeeds or is pleased. Some fail (as they do everywhere), they do not have the patience to adapt themselves to a new soil, climate and conditions. A new-comer must learn to farm over again, as it were. Western methods will not always do to follow here, but new methods can easily be learned, no one needs to fail if he will listen to reason and the experience of others. This is a banner year for Louisiana, crops are good and the



Private Fish Pond on a Louisiana Farm.

price of cotton high. Much new land will be brought into cultivation for next year. I trust this will satisfy the desires you had in mind when you made your request.

Respectfully yours,

C. A. TIEBOUT.

CANTON, MISSISSIPPI, September 22, 1903.

CAPT. J. F. MERRY, A. G. P. A., I. C. R. R., Dubuque, Iowa.

Dear Sir: Your friend, Mr. W. L. Dinkins, of this place, requests that I write you, giving my experiences and impressions of this country. Replying, will state that I came from Indiana to Canton, Madison county, Mississippi, in the fall of 1902, and bought 80 acres of land two miles from Canton, which had not been cultivated for fifteen years. I put out five acres in strawberries and ten acres in peaches, and plowed my land broadcast for spring planting. Then, having plenty of leisure time, I proceeded to build a good barn and comfortable residence, which I moved into in January of the present year. My berries will be in full bearing next spring, from which I feel quite sure of realizing \$200 per acre net. My orchard of peach trees will bear some next year and will be quite a profitable crop in 1905. I don't know of any country in the world where they raise finer peaches. I am told by experienced fruit growers that they realize from \$300 to \$500 profit per acre on Alberta peaches. I have raised a fine crop of corn that will average 40 bushels per acre; have a fine crop of sweet potatoes, and the greatest abundance of very fine hay, worth from \$10 to \$15 a ton right here at home. I measured a half acre of this land, to which I had planted cow peas, gathered ten bushels of peas, worth \$1.50 per bushel, and got 1,600 pounds of the finest hay you ever saw from the same vines, worth \$10—giving me \$20 returns from the half acre, with an expense of not more than \$5. After the hay has been taken off the land, the fertilizing properties of the roots and the pea vines will almost double the yield of any kind of crop the

next year. I am not trying to raise cotton, inasmuch as I find I can make more off my land in fruit, berries, corn, oats and hay than can be realized from cotton, with less than half the labor and expense. I have some fine meadows of native grasses, from which I get a ton of good hay, worth \$10 per ton, per acre. This from land that cost me \$17.50 per acre.

I came to Canton, Mississippi, badly crippled and sorely afflicted with rheumatism, from which I had been a sufferer for several years. After reaching here I stopped all medicine and kept out of doors every day. I am now well and strong—in fact, feel better than I have for ten years; can do as much work in a day as a stout negro. I am happy and delighted with my purchase, having cleared over \$1,500 on my 80 acres this year, and expect to double that next year.

I find the people here generous and hospitable, and ready to give advice and assistance to any decent person who settles among them. The labor here is negro labor, principally. They are a happy and contented people, under fine control, and when properly looked after do excellent work. I have not known of a tragedy since I have been here, and consider this one of the finest countries I ever knew. I could not be induced to go back to Indiana to live. The health of the country is all that could be desired. I find absolutely no malaria here. The lands are fertile and well drained, and are worth more than double the price asked for them.

Stock raising is proving very profitable here, the native grasses furnishing excellent grazing for all kinds of stock. I find many herds of fine graded cattle here. Very little feeding is necessary, as the winters are very mild, stock only having to be fed in February and March, and many of them are never fed at all.

I have made lots of warm friends since coming here, and find these people equal in culture and refinement to any people on earth. Canton is a delightful little city of 4,000 people, with a fine system of waterworks and electric lights, ice factory, planing mill, box factory, brick factory, machine shops, bottling works, etc. The planters in Madison county raise about 30,000 bales of cotton, which is bringing this year \$50 per bale. They have two fine artesian wells in Canton, which flood 200,000 gallons each of the very finest water, nineteen feet high, through a six-inch pipe. Farmers who get scarce of water come to town and get the water they want free. I advise anyone seeking investments to come to Madison county, Mississippi.

Yours truly,

W. B. FINNY.

HAMMOND, LOUISIANA, September 23, 1903.

CAPT. J. F. MERRY, Dubuque, Iowa.

Dear Sir: I have just received your verbal request, asking me as to my experience in this country, and I am glad to say to you what I can. We have a fine country and only need more good actual settlers to take advantage of the opportunity it affords.

I came from Nebraska to Hammond in 1893, principally for my health, which is greatly improved, and I am now truly a well man. I am engaged in dairying, in which I am doing well, and beg to say that I can raise more milk than I can sell. With this interest growing and the railroad giving us better facilities, it will be the richest crop that we have. I raise a good crop of forage and always have some crops growing. Corn and oats do very well.

This is the best country I know of for stock. The grasses grown are excellent and pasturage is always good. Our cattle will always sell and command most excellent prices. Our climate is fine and we have about two months of cold weather. This is a country in which excellent water abounds.

Yours truly,

M. R. DUNN.

AMITE, LOUISIANA, September 24, 1903.

CAPT. J. F. MERRY, A. G. P. A., I. C. R. R., Dubuque, Iowa.

Dear Sir: I came to Louisiana from Adams county, Pennsylvania, and located near Amite nine years ago and bought 58 acres. Have had very good luck with my

crops. I raise corn every year and make from 25 to 40 bushels per acre, and with the same crop I raise from half a ton to a ton of cow pea hay on the same ground. Before planting corn I raise a crop of Irish potatoes or cabbage, giving me three crops annually on the same land. Northern farmers can hardly understand this way of farming, but they should remember that we have no month of the year in which we cannot grow something. My crop of cabbages or Irish potatoes grown on the corn ground I market usually in May, and plant corn as soon as the potatoes are harvested, shipping nearly all of it to Chicago, and get, one year with another, \$100 per acre. I also grow asparagus and find it a profitable crop.

I have had very little sickness. I work in the field the same as I did in Pennsylvania, taking only an hour, for nooning. My income from the 58 acres ranges from \$1,500 to \$2,500 per year. Wild land, say three to five miles from a station, is worth from \$10 to \$15 per acre. Northern farmers need not hesitate to locate in this vicinity, but to succeed they must work and economize the same as in the North.

S. E. HOSTETTER.

BATON ROUGE, LOUISIANA, September 25, 1903.

CAPT. J. F. MERRY, A. G. P. A., I. C. R. R., Dubuque, Iowa.

Dear Sir: Being informed that you would like to learn the experience of Northern men located in Louisiana, I give my views on the situation.

I came here from McLean county, Illinois, in 1896. I have been treated very well by the people. I think they are not only willing but anxious for Northern people to come here to establish homes, and am sure all such will be heartily welcomed. I have farmed all the time I have lived in the state, but am not now living on the farm, having moved to town to send my sons to the university. I have enjoyed the best of health since coming South. I have had some sickness in my family, but none that I think due to climate.

I have produced eighty bushels of corn per acre, and I think fifty bushels of



Dairy and Vegetable Farm of C. H. Hummel, Hammond, Louisiana,
Formerly of Nortonville, Kansas.

oats, but they were not threshed, but fed in the sheaf; have made two tons of hay per acre—Japan clover. Alfalfa does fine on our alluvial lands and can be cut from five to seven times in one season. Our alluvial lands are adapted to the raising of cotton, cane, rice, corn, alfalfa, oats, Bermuda grass and white clover, as well as all kinds of garden truck. I own 4,000 acres of land in East Baton Rouge and Point Coupee Parishes. I think I have fully doubled my property since coming South seven years ago; am pleasantly situated; have better health than I had in Illinois, so that I can truthfully say I am more than satisfied. I think we have here in Louisiana, besides the producing capacity, market facilities, healthfulness and climatic conditions, the cheapest lands in the United States. We have no hot nights and no days as hot as I have seen in Illinois. Our summers are longer and of higher daily temperature, but there is no such extreme heat as I have felt in Illinois. Sunstroke is unknown here. I suppose our cooler nights and freedom from sunstroke are due to the breeze from the Gulf.

I hope the Illinois Central road will be able to send a number of sturdy farmers to fill up the fertile places in Louisiana.

Respectfully,

D. S. DOOLEY.

GREENFIELD, TENNESSEE, September 23, 1903.

CAPT. J. F. MERRY, A. G. P. A., I. C. R. R., Dubuque, Iowa.

My Dear Sir: I cheerfully reply to your request for a statement of my experience in this Southern country. I came here thirteen years ago from Yankton, South Dakota. Had formerly lived in Berrien county, Michigan. Finding the climate in Dakota too severe to suit me I decided to try Tennessee. I wanted to raise fruit so I purchased but forty-five acres of land. Some tried to discourage me but I moved forward and soon had a nice orchard of peaches, pears, grapes and apples. The country is well adapted to fruit raising. I have never missed a crop and have profited financially beyond my expectations.

While I have given most of my time and attention to fruit culture, it is not the only crop of this country. The mild winters make it a desirable place for stock raising. The soil and climate are suited to corn, winter wheat and oats. Corn yields from thirty to fifty bushels per acre and winter wheat from ten to forty bushels. Oats from fifteen to sixty. Corn planted as late as June will get ripe before frost. Cow peas are another important crop. They yield about twenty bushels per acre and sell from \$1 to \$1.50 per bushel. It makes excellent hay, besides being a great fertilizer for the land. Timothy, red-top and clover grow here to perfection. They make from one to three tons of hay per acre, which sells from \$10 to \$20 per ton. We can raise two crops in one season from the same land here and at the same time improve the soil. We can cut our wheat and plant peas, corn, or potatoes and get a good crop.

Trucking is a growing industry here now. All vegetables do well in this climate and soil. We ship beans, peas, asparagus, tomatoes and cantaloupes from here by the carload. About the middle of May of this year we shipped from Greenfield in one day fifteen carloads of strawberries. Our shipping facilities are excellent. Greenfield is a town of about 2,000 inhabitants and is on the Illinois Central midway between Chicago and New Orleans. We have excellent church and school privileges. In some parts of the South colored people form a large per cent of the laborers, but it is not so here. White people cultivate the soil. As a whole this country is a delightful place for a home, and I will take pleasure at any time to answer any inquiry that might be made of me.

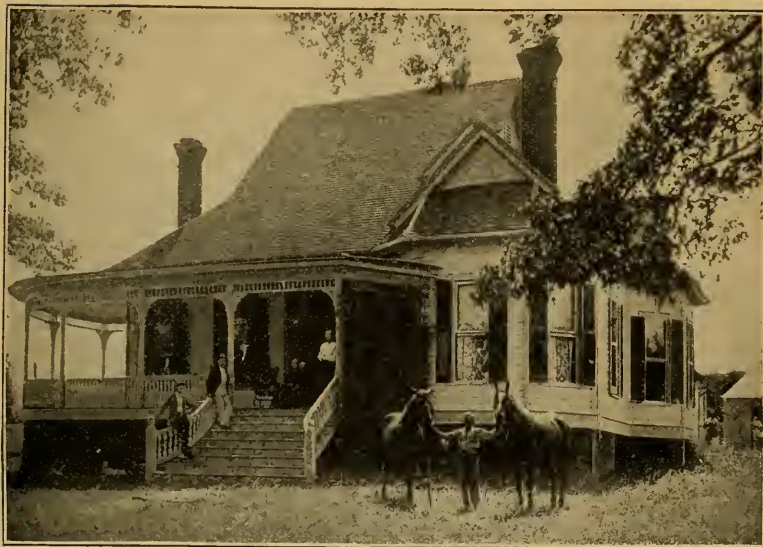
Yours respectfully,

JOHN REDER.

CANTON, MISSISSIPPI, September 22, 1903.

CAPT. J. F. MERRY, A. G. P. A., I. C. R. R., Dubuque, Iowa.

Dear Sir: I came to Madison county, Mississippi, from Sullivan county, Indiana, in 1890 and bought a 560-acre farm one-half mile southeast of Canton, for



Residence, Ridgeland, Mississippi.

which I paid \$22.50 per acre, and was told by many people here that I paid too much. This farm was neglected and run down; I have, with my limited means, gradually built it up, repaired and added to my dwelling, built a nice barn and have good fences around the entire farm. I could easily sell my farm for \$35 per acre to native citizens here. I have given my attention principally to live stock and hay. My farm is level and as pretty and fertile as any Illinois prairie farm. I raise my own grain and can make thirty-five bushels of oats, forty to fifty bushels of corn and one ton of fine hay per acre. I readily get \$10 per ton for hay in the Canton market, giving me a net profit of \$7 per acre for my land. I have a fine herd of grade Galloway cattle, which cost me absolutely nothing, as I only feed them a little hay in February and March; during the balance of the season they keep fat on pasturage. I have on hand now twenty-four grade calves, six months old, that will net me \$15 per head; they will average 350 pounds each and have cost me nothing except pasturage.

I consider investments in land in Madison county, Mississippi, to be the best in the world, at the prevailing prices—from \$10 to \$15 per acre, according to location and improvements. Cotton, corn, oats, hay, sweet potatoes, fruits and berries all pay handsomely. As to the health of the country, I can truthfully say I believe this to be the healthiest country I ever knew. I have no doctor's bills to pay, and the climate is all that could be asked. There has not been a night the past summer when one could not sleep comfortably under light covering. My farm is not for sale at any price. I am delighted with the country and its people and could not be induced to return to Indiana. I am sending photos of part of my herd of cattle, which will compare favorably with any graded herd in the whole state of Indiana. You can say to the people of the North and West that this is the country for investments. Land that can be bought for \$15 per acre will readily bring \$5 per acre rent. These people know how to handle the negro laborers, who, with a little watching, are the best laborers in the world. We have no trouble with them in this country. They are the happiest and best contented people in the world. There is no such thing as social equality in this country. The negroes are well treated, take no inter-

est in politics, and are contented with their mission in life as laborers. I would be pleased to furnish you with any further information you may desire.

Yours very truly,

JACOB BILLMAN.

HAMMOND, LOUISIANA, September 28, 1903.

CAPT. J. F. MERRY, Dubuque, Iowa.

This is to certify that I spent several years as a resident of Peoria county, Illinois, engaged in farming and dairying, selling my milk while there to a cheese factory. Nine years ago this fall we moved to Hammond, Louisiana, where I have been engaged in gardening, fruit culture and dairying, receiving reasonable compensation for my efforts. Our climate is second to none. An artesian well is easily secured at a very nominal figure, producing the purest of water. I have a two-inch well flowing 45 gallons per minute, cost of well, complete, \$173. We like it here; the North has lost its attractions.

Yours very respectfully,

C. H. HUMMEL.

JACKSON, MISSISSIPPI, September 29, 1903.

CAPT. J. F. MERRY, Dubuque, Iowa.

Dear Sir: I am formerly of Lawrenceville, Illinois. I bought 424 acres of land near Jackson in 1897, and the more I stay here the better I like it. We raise one bale of cotton to the acre on the creek bottom land, and from thirty to fifty bushels of corn to the acre, and from one and one-half to two tons of pea hay to the acre. I set out my hill land in peach trees; I first set out 1,200 trees and they looked so well that I set out 3,000 more and they paid me from \$90 to \$150 per acre, so last winter I set out 16,000 more peach trees and purchased 400 acres more land near me. I have been in almost every state in the Union, including California, and I consider Mississippi the best for a man of moderate circumstances to locate in.

MILES W. CURRY.

BOYLE, MISSISSIPPI, September 30, 1903.

CAPT. J. F. MERRY, Dubuque, Iowa.

Dear Sir: Replying to your letter, I am pleased to give what information I can concerning the Mississippi Delta, its opportunities and its prospects. To me it



Aberdeen Angus Cattle, Covington, Tennessee.



Jersey Herd Near Covington, Tennessee.

is an unsolved mystery why thousands of farmers leave the protection of "Old Glory" to settle in a foreign country, in the frigid Northwest, when at best they can hope for but a few weeks of immunity from "Jack Frost"; when right here in our own beloved United States—the best government God ever permitted to exist—is a land rivaling the famous valley of the Nile in fertility, in genial climate and congenial people, where land can be had nearly or quite as cheap as in the Northwest, where much of the land is valuable principally "to sell."

I came here from Humboldt county, Iowa, about January 1, 1897, and bought 320 acres. My means being limited, I cleared up only about 40 acres the first year.

In the early spring of 1897 the mighty "Father of Waters" broke through the confining levees, and we were in the midst of what the sympathetic newspapers termed "a terrible inundation," and a great deal of sympathy was wasted on us. No more mistaken ideas ever existed than those of a Mississippi overflow. I had five days' time in which to prepare—that is, I was warned five days before the water reached my place that the levee had broken. The water does not rush upon one like a Johnstown flood, except immediately in front of the crevasse in the levee. I took my stock to a place of safety—a ridge which never overflows, and there are many such ridges, and I moved my family upstairs, where we were perfectly safe. A couple of hands and myself occupied our time by floating off logs from my field, and it was the cheapest log-rolling I ever did. Aside from a few hens, I lost no stock, and no human lives were lost anywhere around here. Inconvenient? Yes; so is a blizzard in the Northwest, and far more dangerous. The flood subsided in ample time to plant our crops. In fact, we raised the biggest crop in years. The "oldest inhabitant" does not remember the time when an overflow prevented a crop. The levees are now much higher, stronger and broader than in 1897, and the prospect of another overflow is very remote indeed.

I have continued to clear some land each year. I now have about 225 acres in cultivation, which I rent for \$6 per acre per annum. This rental will seem to many people incredible, but when it is considered that the average value of the cotton crop on my plantation this year, notwithstanding a rather short crop, is in excess of \$40 per acre, it will be seen that the rental is not at all out of reason. Thus I enjoy a comfortable income from my plantation and have my time free to follow other pursuits. Let me say that no other part of the Union affords such opportunities for merchandising, investment and speculation. Improved property can be bought so that the rental will produce from 10 to 20 per cent on the investment.

The health of my family has been very good. My wife has enjoyed better health than in Iowa, as her lungs were not strong enough to withstand the rigorous Iowa winters.

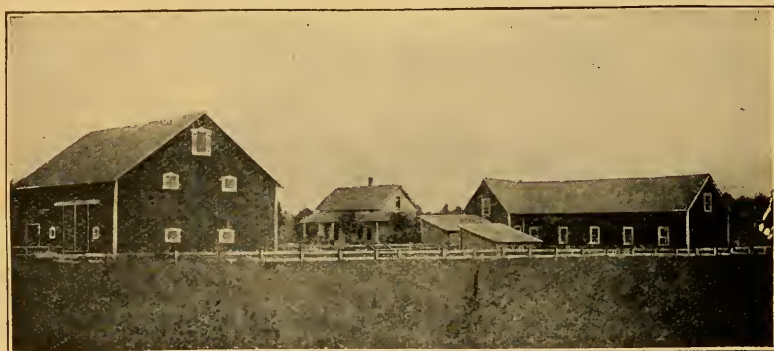
While I seem to have made some extravagant assertions, I believe I can prove to your satisfaction the truth of what I say.

Very truly yours,
E. C. FRENCH.

DURANT, MISSISSIPPI, September 28, 1902.

CAPT. J. F. MERRY, Dubuque, Iowa.

Dear Sir: You ask me about my Southern experience. December of last year I bought of, or rather through, W. O. Glines & Co., agents of Durant, Miss., the famous Linden plantation of 2,520 acres, located on Honey Island, in the Yazoo-Mississippi Delta, Mississippi, about one-half of which is in cultivation and the remainder a magnificent growth of hardwood timber. The soil through this entire section is a black, alluvial loam, every acre of which is as rich and fertile as the far-famed valley of the Nile. The natural yield of this land is not surpassed on the continent. No fertilizers are ever needed, the land can be worked at almost any time during the year, the soil is so deep that the deepest tillage does not reach half through the top, and its absorptive power insures a crop from injury through any drouth. Every variety of crops raised in the North can be grown to perfection on this plantation, the yield in every case being phenomenal. While our best ground in the North is worth from \$70 to \$100 per acre, this best Southern Delta improved land can be bought at this time at one-third these prices, and pay an income, per acre, three times that of our Northern lands. I am well pleased with my Southern investment. We will pick about 700 bales of cotton and crib about 8,000 bushels of corn, besides about 300 tons of hay now in mow for feed. For this first year I consider this good enough.



Truck and Dairy Farm Near Amite, Louisiana.

All that this country needs to bring the price of land to \$100 per acre is a little more Northern enterprise and capital. This is rapidly coming, and before five more years have passed I expect to see this price realized.

Very respectfully,
O. H. TROOK.

COVINGTON, TENNESSEE, October 1, 1903.

MR. J. F. MERRY, A. G. P. A., I. C. R. R., Dubuque, Iowa.

Dear Sir: I can sincerely and enthusiastically recommend Tipton county, Tennessee, to enterprising homeseekers. I came here five years ago from my native place in McLean county, Illinois, with my family. I have had good health and prospered. I brought a herd of Aberdeen Angus cattle and my horses with me, and they have done well. I enclose picture of some of my stock. I bought 45 acres near the county seat, Covington, for \$1,500, for a home. I paid \$2,500 this year for 39 acres of similar land adjoining me, at a bargain.

I am making money. The climate and soil enable me to make far more on this land than I could on the same amount of land in Illinois. I can raise two crops of potatoes on the same land each year, and from 100 to 200 bushels per acre. I have eight acres in second crop potatoes now. We can raise a good wheat crop or oat crop and then a fine hay crop on same land each year. Corn produces from 30 to 60 bushels, wheat 10 to 38 bushels, and oats 25 to 70 bushels per acre. Clover, timothy and grasses do well here.



Cabbage Farm, Roseland, Louisiana.

E. W. Smith last week gathered his corn, and after weighing thirteen of his one hundred young hogs, eight months old, put them on the peas in the field, and within ten days they had gained \$40. All kinds of stock do well here, even when brought from other states. So does poultry. The many springs, running streams and shallow wells add much to the matter of stock raising. Berries and vegetables can be raised here with great profit. A farmer three years ago received \$1,500 from a second crop of potatoes on 12 acres and paid for 100 acres with it. Bermuda grass will sustain and keep fat from three to five head of cattle per acre for six months in the year.

The Illinois Central furnishes the *finest* passenger and market facilities. Good farms can be bought, according to location, at from \$10 to \$50 per acre, which will bring twice the results as the same amount of land further north. I have made \$4 per month at the creamery on each of my cows, besides raising the calves. If the farmers of Illinois and Iowa realize the advantages here, this country will soon have 125 inhabitants per square mile instead of 67. Many enterprising farmers are here now from these and other states. Society and schools are good.

Respectfully,

FRANK H. DICKINSON.

HAMMOND LOUISIANA, September 13, 1903.

CAPT. J. F. MERRY, Dubuque, Iowa.

Dear Sir: I came here in 1895 from Sioux City, Iowa, principally on account of the climate, which has relieved me almost entirely of my catarrhal troubles.

This is a fine country for the up-to-date farmer. With proper attention the land can be made to bring forth almost one continuous round of crops, such as oats, corn, potatoes, cane and hay, and especially all kinds of vegetables and small fruits.

It is a great dairying country and is developing wonderfully. With the fine flowing wells furnishing pure, cool water in great abundance, no finer country could be asked for, as we have fresh pasturage all the year around, keeping the stock

in good condition. Everything is being done to bring the dairying interest to the front. It is now, comparatively speaking, in view of the present outlook, in its infancy.

While speaking of the industries which interest mankind from a financial point of view, let us not forget some items which are pleasing to the eye as we rest in our hammock beneath the shade of these beautiful umbrella China trees. With humming and mocking birds flitting amid the flowering vines, among the roses, violets, jasmines and azaleas and many ornamental shrubs which you of the North have to depend upon the greenhouse to supply, we may rest from our labors. We are well satisfied with this country and think those now settled here will join in saying *Hammond is all right.*

Respectfully yours,
HUGH WALSH.

DURANT, MISSISSIPPI, September 29, 1903.

MR. J. F. MERRY, A. G. P. A., Illinois Central Railway Co., Dubuque, Iowa.

Dear Sir: I served my apprenticeship in the Rogers Locomotive Machine Works at Paterson, N. J., and followed railroading for 27 years. When I concluded I was too old to railroad any more, I concluded I would try farming. I state this to show that I am not a practical farmer.

On the first of January, 1902, I bought of W. O. Glines & Co. a farm of 305 acres, three miles south of Durant, which had a few strawberries on it. I netted the first year \$166.87 per acre from my berries. I now have six acres of nice berries growing, ready for next year. Good corn crop—have just housed five acres of the poorest corn I have for present use, which gave me 90 bushels, without fertilizer and with very little work.

I had a patch of about one and one-half acres in cantaloupe melons, and netted \$102 off of the one and one-half acres. I have a fine cotton crop that will make me from one-half to three-quarters of a bale per acre. I find labor cheap and plenty of it. I pay from 50 to 75 cents per day for good labor, and they board themselves. I believe that every man who has any energy at all about him can do well here. Have not had a physician in my house, except on a social visit, since I have been here. We are all enjoying the best of health and a good appetite.

Very truly,

A. BROWER.

P. S. I failed to state that after selling my crop of melons, I cut a ton and a half of good hay the same fall.

RIVERSIDE, MISSISSIPPI, September 25, 1903.

CAPT. J. F. MERRY, Dubuque, Iowa.

Dear Sir: Replying to your request of a few days since, I beg to state I came to Mississippi from Missouri a few years since. I purchased 1,185 acres, of which I have opened 350 acres. Last year my rentals on the part devoted to cotton netted me \$13.50 per acre over all expense. I produced forty bushels of corn per acre, with but little attention given to it. I have merchantable timber on the unopened part of my land sufficient to pay the cost of it. The Yazoo & Mississippi Valley Railroad, just completed one-fourth of a mile from my land, gives splendid service and has raised the value of my lands one hundred per cent in one year. This is true of all other lands near this line.

I raise stock at a cost so low it is hardly felt, as the green grass and cane afford fine pasturage all the year round. Our health is excellent. A very large percentage of the lands in this, Quitman county, is already in the hands of Northern people, and the work of removing the valuable timber and opening the lands is going forward with a rush. Land prices are advancing rapidly. Many fortunes have been made here in the last two years by Northern investors; all of them are located permanently and all are entirely contented and prosperous.

Yours truly,
W. T. JAMISON.

RIDGELAND, MISSISSIPPI, September 30, 1903.

CAPT. J. F. MERRY, Dubuque, Iowa.

Dear Sir: We have an 80-acre tract of branch-bottom meadow land that cost us \$17 per acre all under fence. Last year we pastured 90 head of cattle on this tract most of the time. Took them off November 15. This year early in June we mowed over the entire tract, principally to clear out the weeds. We are now finishing our second cutting of hay. A careful estimate of the two crops will be about 120 tons. We have already sold a good deal of the hay at \$10 per ton, in bulk. We have a bid of \$10 per ton, baled f. o. b. cars here for the balance.

The expense, I estimate f. o. b. cars, is \$3.60 per ton. This includes the labor for mowing, pressing and hauling. This will leave us a net profit of \$768, being more than half of the purchase price for land for the one crop.

Off of 40 acres of peavine hay sown in July in our young peach orchards, we have cut and matured over 30 tons of the finest hay that is made. Have bargained to sell it in Jackson for \$14 per ton baled. This will net us about \$10 per ton, besides the nitrogen furnished to the orchards, which was the prime reason for sowing in the orchards. These hay crops are not large yields. We have done much better other years. It merely shows that there is a good profit in raising hay for the market in this section of Mississippi.

Yours truly,
C. B. THOMPSON.



Tomato Farm, Roseland, Louisiana.

RIDGELAND, MISSISSIPPI, September 30, 1903.

CAPT. J. F. MERRY, Dubuque, Iowa.

Dear Sir: After living in Jackson a few years, I moved to Madison county in 1897 and bought a farm two miles east of Ridgeland of 734 acres, about 200 acres of switch cane bottom and the balance rolling hill land. About 400 acres of the land was cleared. The place cost me \$6,000. Some of the land I considered very poor, but I have made it rich.

I went into buying and raising stock and general farming. I have made over \$20,000 in my stock business during the past six years. I have three Hereford bulls, one Durham and one Devon—all thoroughbred, and expect to buy two Polled-Angus bulls this fall. I have several Red Polled cows, altogether about 100 head of high grade. I have at the present time \$1,500 invested in cattle alone, including about 40 head of four-year-old steers that will average 1,600 pounds each. I am thoroughly convinced that I can make more money in the cattle business than any man can make North with the same amount of capital invested.

I have 400 head of hogs and 40 head of horses and mules. I have raised seventy-five bushels of corn to the acre and can raise fifty any year on good land, and believe I could raise one hundred bushels if the season was good, with special attention. I have also made good money in raising hogs and am thoroughly convinced that I can make more money in raising mules and horses than I can in raising cotton. The natural grasses here beat the world for hay. Three years ago I built my residence and have made \$12,000 worth of other improvements since I came here.

I have run my stockers in switch-cane all winter without feed but advise some winter feeding. My summer grazing is principally Bermuda grass, and I consider there is nothing better for cattle and hogs. I finish my cattle in sixty days on cotton seed meal and hulls at a cost of ten cents per day per head. I can make more hay here per acre than can be made in Illinois or Iowa on the best land they have. I sell a great many of my beef cattle to local butchers and always get a better price than I do in St. Louis or New Orleans. I am well satisfied with what I have done, although I am sure I could have done better if I had had the experience that I now have.

Lands are cheap here, and all a man needs to make a success is some capital and some push, and then push it. We have a good community of Northern farmers already started. My neighbors have all done well. Some of them raise more fruit than stock.

We will all be glad to show our Northern friends what we have done and are doing. I remain,

Yours very truly,
J. F. JOHNSON.

DURANT, MISSISSIPPI, October 3, 1903.

MR. J. F. MERRY, Dubuque, Iowa.

Dear Sir: I traded some Illinois land, town property and a small stock of goods for a track of 875 acres of land, three miles from here. Five years ago the land in cultivation made four bales of cotton and but little corn. This year the same land will make 50 bales of cotton and more corn than the place can use. Last year I bought a small place joining mine that produced 7 bales of cotton. This year it will produce 26 or 27 bales. The increase in both places is due to clearing up the fields that had grown up to briars, and draining the wet places. I have since added 660 acres of land that produces 65 to 70 bales of cotton. I am operating a small saw mill in the timber portion of the land and find it profitable. Money here is easy



Residence Near Canton, Mississippi, Showing Short-horn Cattle.



Residence Near Jackson, Mississippi.

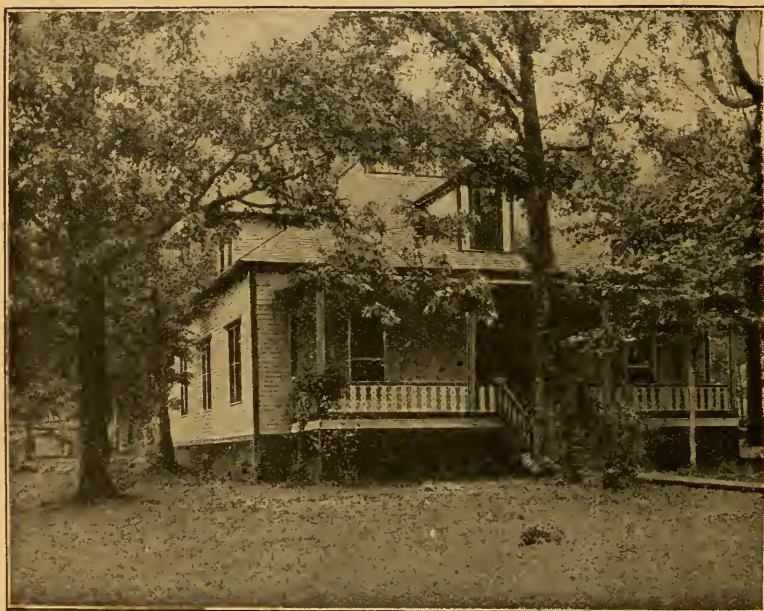
to obtain to operate on, and anybody can succeed here who will try. My land is located at the Aberdeen junction of the I. C. R. R., and is chiefly on big black bottoms, but runs back into the hills on the west side. Pastures are better here than any place I have ever seen where native grasses are depended on.

I came from Clinton, DeWitt county, Illinois, to this place. Myself and family have good health here, find the society good, and the climate pleasant, as there is always a breeze here, and am doing better than I could in any other place I know of. Lands have increased from \$5 to \$6 per acre to \$15 to \$25 since I came here. I can recommend the country to anybody wishing to locate in the South. I found truck farming profitable here, as one can clear from \$200 to \$500 per acre from beans, cucumbers, cantaloupes, squash and asparagus. Strawberries average from \$300 to \$900 per acre and are shipped from here in great quantities, from six to fifteen cars per day. Small places with strawberry patches have increased in value from \$10 or \$12 per acre to \$50 to \$100 per acre in the last five years.

I traveled for ten years as a drummer through North, South, East and West and have never seen a place where all branches of business are as profitable and pleasant as here.

Hoping my letter will encourage somebody wishing a home to investigate this location, I remain,

Yours very truly,
W. C. WHITE.



Residence, Roseland, Louisiana.

GENERAL INFORMATION.

This pamphlet covers a variety of subjects, making it a reference book worthy, we trust, a place in every library. Applications for additional copies may be made to J. F. Merry, A. G. P. A., I. C. R. R., Dubuque, Ia., or the nearest of the following passenger representatives. Your home railroad ticket agent will advise you freely as to train time, ticket rates and the like to points on the Illinois Central and Yazoo & Mississippi Valley Railroads, or such information can be obtained of the nearest of the following passenger representatives of the Illinois Central Railroad:

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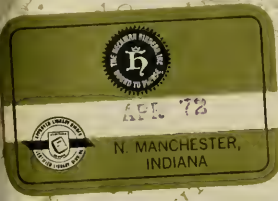
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